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Simulation-Based Mental Health Nursing Education

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Abstract

DNP Project Goal: Provide a simulation-based mental health nursing education experience to pre-licensure nursing students prior to participating in a mental health clinical rotation to reduce anxiety and increase confidence in therapeutic communication and care of the patient with mental health needs.

Background and Review of Literature: Research suggests nursing students feel anxious about participating in mental health clinical rotation and have decreased confidence in treatment and communication with patients.

Methods: A quality improvement project was conducted utilizing seven nursing students from a BSN program. The participants engaged in a simulation-based mental health nursing education experience, which included completing a learning module and posttest, satisfaction and self-confidence in learning questionnaire, followed by participating in two informal focus groups.

Results: After the simulation experience, student questionnaire results demonstrated strong agreement by 57% of participants, that anxiety was decreased. In the informal focus groups, participants agreed simulation was beneficial, resulted in less anxiety with more confidence, and should be incorporated into the nursing curricula.

Implications to Practice: Implementing simulation into nursing curricula will provide an opportunity for students to practice communication skills, obtain feedback, and participate in discussion on methods to improve clinical practice.

Conclusion: The results suggest further exploration of implementation of simulation-based mental health nursing education experience into nursing programs.

Keywords: mental health simulation, standardized patient, undergraduate nursing, mental health nursing, integrating mental health simulation into nursing education.

Introduction

The mental health nursing rotation can be one of the most challenging clinical rotations for nursing students. The literature suggest that nursing students are often intimidated, anxious, and feel insecure when treating mental health patients (Alfes, 2015; Alexander & Dearsley, 2013; Alexander, Sheen, & Reinhart, 2017; Doleen, Giddings, Johnson, de Nathan & Badia, 2014; Thompson, Martin, & Chandra, 2016). Some nursing students can hold unfavorable attitudes toward mental health patients and lack clinical practice to respond to patient needs (Barrett & Jackson, 2013). By providing a positive learning environment, first year clinical students in their mental health rotation, through simulation, may gain an improved outlook and sense of confidence when interacting with patients.

Background

It is estimated that nearly 50% of Americans will experience some sort of mental illness sometime during their lifetime (Rutherford, 2017). In addition, in the past year, only 57% of patients with depression and 42% of patients with anxiety, sought and received care (Rutherford, 2017). Furthermore, the United States is experiencing a mental health crisis, pushing an economic loss of $444 billion annually (Rutherford, 2017). This loss included loss of productivity and overall health care cost (Rutherford, 2017).

Notably, Delaney (2016) reported, of the 4.1 million registered nurses (RNs) in the United States, only 4% work in mental health. In addition, it is predicted that mental health services would increase by, at least. 25% with the now over 4.5 million people with access to health care (Delaney, 2016). However, with new stipulations being placed by current President Donald Trump, insurance premiums and benefits may shift, causing even more changes in services for patients. Hence, a shortage of mental health care providers, including psychiatrists,

psychiatric mental health nurse practitioners, and social workers, may cause a swing in responsibility to the psychiatric RN (Delaney, 2016; Rutherford, 2017; Salmond & Echevarria, 2017; World Health Organization, 2016). This swing will allow for RNs to provide low intensity mental health services to patients (Delaney, 2016). Therefore, with the introduction of new responsibilities for the psychiatric RN, modules including education and simulation will be necessary to help prepare the RN for the expanded role (Delaney, 2016). These modules include screenings, triage, telehealth, stepped care, and low intensity interventions for mental health patients (Delaney, 2016).

With the role of the RN expanding, schools of nursing will need to provide modification to curriculum, to include educational modules and simulation for nursing students to prepare for working with mental health patients in an expanded role (Delaney, 2016; Rutherford, 2017). Rutherford (2017), suggests that behavioral health assessment be introduced early in the curriculum and built upon throughout the program. It is equally important for nurse educators, in addressing the health care shortage, provide a safe, positive learning environment and encourage students to consider mental health nursing as a career of choice.

Problem Statement

There is growing evidence to support nursing students experience anxiety and decreased confidence prior to attending clinical rotations (Alfes, 2015; Alexander & Dearsley, 2013; Alexander, Sheen, & Reinhart, 2017; Doleen et al., 2014; Thompson, Martin, & Chandra, 2016). To help address these issues, simulation-based nursing education has been integrated into most nursing education programs. Simulation-based nursing education provides a pedagogical approach for providing students a safe environment to practice clinical skills and critical thinking without compromising patient safety (Kim, Park, & Shin, 2016). In addition, the benefits of

providing this type of education allows for immediate feedback, individualized learning opportunities, and exposure to situations students may not experience while in clinical rotations in nursing school (Kim, Park, & Shin, 2016). Of equal importance, students are provided a curriculum that allows for learning in the classroom, reinforcement in simulation labs, and application in the clinical setting. Therefore, a Doctorate of Nursing Practice (DNP) quality improvement project has been created for the purpose of aiding pre-licensure nursing students, in their mental health rotation, to decrease anxiety and improve confidence in therapeutic relationships and treatment of mental health patients. The results of this project were due to the implementation of simulation-based mental health nursing education experience in a baccalaureate of science in nursing pre-licensure (BSN-PL) program for second year nursing students. The goal of the project was for students to feel less anxious and more confident providing nursing care to patients with mental health problems.

Organizational "Gap" Analysis of Project Site

The review of literature conducted for this project provided significant evidence to attest that students feel anxious and lack confidence prior to entering their mental health clinical rotation (Alfes, 2015; Alexander & Dearsley, 2013; Alexander, Sheen, & Reinhart, 2017; Doleen et al., 2014; Thompson, Martin, & Chandra, 2016). Research indicates students are unsure of what to expect in the mental health clinical setting, are anxious about how to communicate with mental health patients, and have biases related to mental health disorders and caring for mental health patient (Alexander & Dearsley, 2013; Alexander, Sheen, & Reinhart, 2017; Doleen et al., 2014; Ong et al., 2016; Poreddi, Thimmaiah, Parhupu, Badamath, & Badamath, 2014; Thompson, Martin, & Chandra, 2016). To improve mental health education for students, a learning module and simulation-based mental health education experience was implemented into

a BSN-PL curriculum. The BSN-PL program, in which this project was implemented, provides mental health didactic and clinical during the BSN-PL students' sophomore year. During that time, students are new to providing nursing care. By providing a simulation-based mental health nursing education experience in this BSN-PL program, a safe environment was presented for students to build confidence prior to entering the clinical setting.

As part of the quality improvement simulation project, a small intervention group was provided a Major Depressive Disorder Learning Module and participated in a simulation-based mental health nursing education experience. The simulation experience used a standardized patient who suffered from Major Depressive Disorder and suicidal ideation. Participants were required to conduct a risk assessment and pass medication to the standardized patient whom had never received the medication in past. As a result of the simulation, participants performed a risk assessment, provided therapeutic communication, applied knowledge from the learning module, and evaluated interventions utilized during the session.

Review of Literature

The aims of the review of literature were to research nursing evidence-based practice to determine if simulation would be beneficial in nursing education in baccalaureate degree programs, by providing a better foundation prior to entering the clinical rotation. The questions guiding the review of literature were: (1) Does mental health simulation, using standardized patients, decrease anxiety and improve confidence? (2) What are some of the reasons nursing students are intimidated by working with mental health patients? (3) What are some ways clinical rotations in mental health can be improved?

The search engine utilized for this review of literature was CINAHL. The search took place in September, 2018. The search focused on the use of mental health simulation in

baccalaureate degree nursing programs. Inclusion criteria included articles published in the last five years utilizing the key words ‘mental health simulation’, ‘standardized patients’, ‘undergraduate nursing students’, or ‘mental health nursing.’ Exclusion criteria included articles published in languages other than English, did not address anxiety, confidence, or other attitudes toward attending a mental health clinical rotation, and or was not focused on mental health. Initially, 69 articles were retrieved based on the key terms. Once the inclusion and exclusion criteria were reviewed and duplicate articles were removed, the search was narrowed to six research articles. The six chosen were all deemed to be a level IIa with a class B criteria based on the John Hopkins Evidence Based Practice Rating Scales (JHEBPRS). Additionally, the six articles selected either reviewed a quasi-experimental study and or randomized control trials to collect data for analysis.

Analysis of the Data

After a thorough review of the selected six articles, the following four emerged as themes: participants, simulated patients, anxiety, and confidence. The articles included reviewed studies that consisted of qualitative measures, mixed methods and or quasi-experimental design. Although the types of studies described in the articles may have used different designs, they all focus on methods to decrease anxiety and increase confidence. Additionally, several of the authors reported they had seen positive results regarding nursing simulation, while other authors noted a need for further research. Furthermore, based on the small number of participants in some of the studies, more research is needed to determine if simulation utilizing standardized patients is beneficial to students prior to starting their mental health clinical rotation. The following review of literature provides a basis for the quality improvement simulation project.

Mental Health Bias Impact on Nursing

Thongpriwan, Leuck, Powell, Young, Schuler and Hughes (2015), conducted a study which indicated nursing students were less likely to be interested in mental health nursing as a career choice because of stereotypes and anxiety involving care for mental health patients. The literature review indicated factors associated with decreased interest in mental health nursing included bias, stigma, and negative attitudes toward mental illness (Poreddi et al., 2014). Other characteristics, which impeded student interest before participating in their mental health clinical rotation included anxiety related to fear of the unknown, lack of confidence in treatment and therapeutic communication, and fear of being hurt by mental health patients (Alexander & Dearsley, 2013; Lin Ong et al., 2016).

Mental Health Simulation with Student Nurses

Alexander, Sheen, Rinehart, Hay & Boyd (2018) utilized standardized patient simulation to determine the impact of simulation on attitudes and anxiety of students toward mental illness and working with mentally ill patients. Encompassed in this research were three independent studies to determine if behaviors and perceptions of students would change when exposed to standardized patient simulation (Alexander et al., 2018). Qualitative method and thematic analysis was used to determine the results of the study. The thirteen students, who participated in the study, were provided standardized patients and scenarios in which they were to provide nursing care. Students were exposed to significant behaviors in a realistic environment. After the simulation, they participated in semi-structured focus groups (Alexander et al., 2018). The thematic results of the study indicated that students could identify the need for critical thinking and could do further research themselves to learn independently about their patient's conditions (Alexander et al., 2018). Furthermore, students also identified that using standardized patients

was a significant factor in the reduction of anxiety before attending their clinical rotation. Finally students listed improvement of confidence as a benefit from participating in the simulation (Alexander et al., 2018). Limitations of this study involved a lack of literature in providing simulation for mental health practice and a small sample size. The study did emphasize that it used the sampling strategy and did not represent generalization for nursing students (Alexander et al., 2018).

Simulation Replacing Clinical Time

Soccio's research explored replacing clinical time with simulation in mental health. The aim of the mixed-methods design was to determine if mental health simulation provided knowledge and self-confidence greater than or equal to what was achieved in the clinical setting (Soccio, 2017). According to the National Council of State Board of Nursing ([NCSBN], 2014), up to 50% of clinical time can be replaced with simulation (Soccio, 2017). To determine the efficacy of replacing clinical time with simulation, Soccio's research utilized forty-eight nursing students in a baccalaureate degree nursing program (Soccio, 2017). Students were equally distributed between a control group and experimental group, with all students participating in the quantitative portion of the study. As part of the quantitative portion of the study, students were required to participate in Assessment Technology Institute's (ATI) RN Mastery Exam. Twenty-four students from the experimental group participated in the simulated experience and then received a qualitative questionnaire comparing mental health simulation to traditional clinical hours (Soccio, 2017). The results of the qualitative questionnaire revealed students believed the simulation helped prepare them to deal with certain situations, manage behaviors, and communicate therapeutically (Soccio, 2017). Equivocally, students reported the communication was beneficial because they were able to communicate with mental health patients in distress,

which prepared them for real-life situations (Soccio, 2017). In contrast, what students found least beneficial revolved around repeating simulation experiences and the limitations they received in clinical rotations, i.e. not passing medications or participating in mental health code situations (Soccio, 2017). The qualitative portion of the study revealed no significant differences of mental health knowledge and self-confidence if 25% of clinical rotation hours were replaced with simulation (Soccio, 2017). Limitations of this study included small sample size and the researcher taught the didactic and lab portion of the class (Soccio, 2017).

Standardized Patients in Mental Health Simulation

Alexander and Dearsley (2013), integrated a pilot study into a Bachelor's of Science in Nursing (BSN) program, to determine if the use of standardized patient simulation would provide confidence, reduce anxiety, and offer engagement in therapeutic interaction prior to attending clinical. The aim of this study was to determine if integrated simulation would better prepare students for the clinical setting by providing a safe environment for therapeutic interaction with mental health standardized patients (Alexander & Dearsley, 2013). Thirty-three BSN students were provided a pre- and post-simulation questionnaire regarding their experience with standardized patients in mental health. To prepare the students, they received education prior to participating in the simulation, including lectures, treatment plans and management of the disease process (Alexander & Dearsley, 2013). The results of the study indicated students were impacted positively in the development of therapeutic communication, had improved confidence and reduced anxiety prior to participating in their clinical rotation (Alexander & Dearsley, 2013). Limitations of the study included a small sample size, majority of the students were female, and majority of the students were mature in age (30 as the mean age).

Mental Health Simulation: Therapeutic Communication

Thompson, Martin and Chandra (2016), conducted a quasi-experimental study on the use of simulated psychiatric scenarios for nursing students during their orientation to their clinical rotation to reduce anxiety and enhance communication with mental health patients. The study design integrated a pre and post evaluation design to identify, examine and clarify casual relationships related to therapeutic communication with mental health patients. Twenty-eight pre-licensure nursing students in a baccalaureate nursing degree program participated in the study. Each student was give pre- and post-simulation evaluations (Thompson, Martin & Chandra, 2016). The results of the evaluations noted improved communication skills with mental health patients and increased confidence when treating patients (Thompson, Martin & Chandra, 2016).The results of the self-reported evaluations demonstrated that the use of standardized patients helped with improvement in communication skills, both verbally and non-verbally, and were able to transition their line of questioning throughout the patient interview. In addition, they also were able to better understand the use of silence in therapeutic communication (Thompson, Martin & Chandra, 2016). Overall, the students felt the simulation was effective and helped to improve their confidence and decreased anxiety (Thompson, Martin & Chandra, 2016). Limitations of this study included enhanced learning through repetition, increased anticipatory anxiety, and students changing how they would perform care because they watched their peers during their simulation. Other limitations included small sample size, standardized patient experience and depiction of mental illness, and participation in only one simulation (Thompson, Martin & Chandra, 2016).

Evaluation of Mental Health Simulation

Doleen, Giddings, Johnson, Guizado de Nathan, and Badia (2014) implemented a project to incorporate standardized patient mental health nursing simulation into a nursing program. The project had ninety-four participants who were nursing students. The students were observed over three semesters. Each were provided standardized patient mental health simulation scenarios for bipolar disorder, schizophrenia, and anxiety (Doleen et al., 2014). The standardized patient mental health simulations allowed for two students at a time to work with a standardized patient (Doleen et al., 2014). The simulation provided time for the students to interview the standardized patient, lasted approximately 20 minutes, and included a debriefing following the simulation (Doleen et al., 2014).

After the simulation, an 11-item questionnaire was provided to the students for completion and yielded positive results. Findings of the post evaluation indicated that students felt they were able to recognize and assess the mental health disorder case simulations they were exposed to, developed increased therapeutic communication skills, and articulated, through self-report, feelings that they could provide a safe environment for patients (Doleen et al., 2014). Also, the students reported increased confidence, improved communication skills when interviewing patients, and improvement in applying knowledge in practice (Doleen et al., 2014). For this project implementation, some of the feedback to improve the project from faculty who participated, included the need of another simulation because the amount provided was counterproductive at times because more students had to be assigned to one standardized patient (Doleen et al., 2014). Overall, the results of the project implementation determined an increase in therapeutic communication, increase in confidence, a decrease in anxiety level prior to clinical

and the effectiveness of using standardized patients when clinical placement is not available (Doleen et al., 2014).

Standardized Patients versus Role-Play

Alfes (2015), conducted an experimental crossover designed study utilizing two cohorts of pre-licensure nursing students. Seventy-seven students, from diverse backgrounds, were divided into two experimental groups. The participants included thirty-one students from a Masters of Nursing (MN) program for students with non-nursing baccalaureate degrees and forty-six Baccalaureate of Science in Nursing (BSN) students. The students were mixed and placed into groups A and B. Group A received standardized patient simulation then role-play simulations, while Group B had the opposite (Alfes, 2015). Once the simulations were completed, the students received several assessment to measure the following: knowledge, attitude and confidence. To assess knowledge, an eight item multiple-choice test was administered, for attitude, the Attitudes of Mental Illness Questionnaire, and self-efficacy was measured using the Mental Health Nursing Clinical Confidence Scale (Alfes, 2015). Of the three assessments, the only one which had remarkable statistical significances was in self-efficacy. Although the MN group reported an increase in self-efficacy, the BSN cohort indicated the highest level of self-efficacy throughout the simulations (Alfes, 2015). The only conclusion made was that repetition of simulated scenarios provided more effective communication with mental health patients (Alfes, 2015). The limitation of this study was the small sample size (Alfes, 2015).

Summary of Reviews

Research indicated that the use of simulation-based mental health nursing education experiences can help bridge theory-to-practice gap, increased confidence with mental health

patients, and help decrease student anxiety (Alfes, 2015; Alexander & Dearsley, 2013; Alexander et al., 2018; Doleen et al., 2013; Thompson, Martin & Chandra, 2016). In fact, several of the articles reviewed suggested that mental health simulation be utilized prior to students participating in their mental health clinical rotation. The use of standardized patients will help students recognize verbal and non-verbal communication cues to aid in the patient interview, assessment, nursing diagnoses, implementation and evaluation of interventions. In conclusion, students will feel more confident prior to entering their clinical rotation by practicing in a safe environment and receiving immediate feedback to improve their clinical skills.

Evidence Based Practice: Verification of Chosen Option

To decrease anxiety and increase confidence, undergraduate nursing students participated in a simulation-based mental health nursing education experience prior to entering their mental health clinical rotation. The advantages of providing simulation in nursing is to provide a patient-nurse experience to each student, to allow independent critical thinking and decision making, customize and individualize learning experiences for each student and allow for immediate feedback (Li, 2007). Additional advantages allow for students to be exposed to experiences they may not be exposed to in their clinical rotations, allow for a safe learning environment for students to make mistakes, and allow for experiential learning practices (Li, 2007). Utilizing simulation allows for nurse educators to bridge the theory-to-practice gap, by exposing students to material in class, practicing in the simulation lab, and implementing in clinical practice.

Theoretical Framework for Evidence Based Practice Model

The theoretical framework used for this DNP project was the National League of Nursing (NLN) Jeffries Simulation Theory (Jeffries, Rodgers & Adamson, 2015). The design of the NLN Jeffries Simulation theory includes the development of learning objectives which coincide with

the appropriate subject matter and complexity for use of critical thinking and problem-solving skills. Physical and conceptual components are utilized in the design to provide a realistic environment and progression of simulation (Jeffries, Rodgers & Adamson, 2015). The design must include development of role, briefing and debriefing strategies (Jeffries, Rodgers & Adamson, 2015). A learner centered environment must be available for simulation to be effective. This includes collaboration, experiential learning experiences, providing an environment of trust, and receiving "buy-in" from the students and facilitators of the learning experience (Jeffries, Rodgers & Adamson, 2015).

This theory separates the outcome into three categories (Appendix A). The categories are participant, patient and system outcomes (Jeffries, Rodgers & Adamson, 2015). The participant outcomes center on how the student reacts to the simulation experience, what the student learns from the simulation experience, and how the student incorporates what they learned in simulation into the clinical environment (Jeffries, Rodgers & Adamson, 2015). The major factor of this framework, in this DNP project, is the participant reactions. The reactions include participant satisfaction, perceived confidence, learning and behavior (Jeffries, Rodgers & Adamson, 2015). Since the concentration of this project was student focused, the framework allowed for all aspects of the student experience to be studied.

The NLN Jeffries Simulation Theory figure (Appendix A), gives a visual of what to expect in simulation. The background provides the goals and expectations of the simulation, which leads to the design for development of the simulation. The simulation experience encompasses a learner-centered experience. For this DNP project, following the NLN Jeffries Simulation Theory, the simulation was created and fostered a trusting environment, experiential learning experience, and an interactive and collaborative learning environment. Another part of

this theory included the role of the facilitator, participant interaction and educational strategies (Jeffries, Rodgers & Adamson, 2015). The outcomes of the theory are distinguished by the system, patient, and participant. In conclusion, by using this strategy in this DNP project helped to predict learning outcomes met by students.

Goals, Objectives and Expected Outcomes

Using the NLN Jeffries Simulation Theory, mental health simulation using simulated patients, was incorporated into a baccalaureate nursing program. The purpose was to provide a simulation-based mental health nursing education experience to decrease anxiety and build confidence in therapeutic relationships and treatment of mental health patients.

The simulation-based mental health nursing education experience provided education to nursing students about a common mental health disorder they would be exposed to in the clinical setting. As part of the education experience, the students were provided a learning module that was completed prior to the simulation. Following the review of the learning module, participants participated in a simulation and debriefing activity related to the learning module. The purpose of the simulation activity was to reduce anxiety and increase confidence by providing a safe environment for students to learn. In addition to the simulation, students participated in two informal focus group meetings during their clinical rotation. The purpose of the focus groups was to determine if the simulation-based mental health nursing education experience prepared them for clinical and if there was anything else the DNP student could provide to improve the success of the participant in their clinical rotation.

Project Design

The methodology for the project design of this DNP project was based on the assumption that implementing a learning module, simulation and two informal focus groups into a BSN-PL

program would result in reduced anxiety and increased confidence in therapeutic relationships and treatment of mental health patients. This quality improvement simulation project was used to determine if statistical significance was achieved by measuring the student's attitude toward satisfaction with learning and self-confidence in receiving a simulation-based mental health nursing education experience prior to entering their mental health clinical rotation.

The Plan, Do, Study, Act (PDSA) model of quality improvement was also utilized to implement the project (Agency for Healthcare Research and Quality [AHRQ], 2008). This model was developed to accelerate the quality improvement process. The PDSA cycle is broken down into four steps. Each step has its own process to reach the overarching goal. In the planning process, the information is collected and a plan is formulated to determine the area of quality improvement and how to collect data. In the Do step, a small-scale trial is completed. The Study step analyzes the data and studies the results. Finally, the Act step determines changes to be made based on the results (AHRQ, 2008).

To provide evidence-based support for the learning module and simulation, clinical questions were addressed. These clinical questions were, "Will a learning module and simulation decrease anxiety among nursing students prior to entering clinical and increase confidence in providing therapeutic communication and treatment of patients with mental health problems?"

Project Site and Population

The simulation-based mental health nursing educational experience was provided at a private, not-for-profit university. Seven (n=7) students, out of a cohort of 35, were asked to participate in the project. Participants had to be at least 18 years of age to participate, were in their second semester of their sophomore year, and enrolled in a mental health nursing class and

clinical. The group was chosen randomly based on the timeframe the participants were to enter their mental health clinical rotation.

Nursing faculty and trained standardized patient volunteers provided the simulation-based mental health nursing educational experience for the participants in the university's simulation lab. The faculty and DNP student managed the simulation, while the trained standardized patient volunteers played the parts of patient and charge nurse. The DNP student facilitated the debriefing session after the simulation and the two informal focus groups on campus.

Setting Facilitators and Barriers

The DNP student, together with faculty and student volunteers were the facilitators of the simulation-based mental health nursing education experience. The project implementation took place at the university where the participants were enrolled in classes. Some of the advantages of providing this project at the university was familiarity with the environment and faculty, access to a simulation lab, and computer access. The stakeholders in this project implementation were the faculty members and students. This project allowed for implementation of best practices and met the standards for simulation set by the National Council of State Boards of Nursing.

Some of the barriers for this project included:

- Participants having no prior experience with simulation.
- Participants having very little clinical experience and exposure to patient care.
- Participants stated they were nervous because they didn't know what to expect from the simulation.
- Participants were apprehensive about perceived judgment by the DNP student.

- Participants engaging in the learning module prior to the simulation, since there was no way to track if they watched the PowerPoint presentation in the Blackboard shell.
- The posttest was not proctored, so there was no way to know if the participants looked up the answers to the test, received answers from other participants, or took the test together.
- Participants could possibly be swayed by other participants in the informal focus groups, so this could lead to bias in answers.
- Timeframe to implement the project.

The barriers had minimal impact on the implementation of the project. There was marginal cost to complete, and the DNP student had full support from administration to carry out the project. Volunteers were utilized as patient and nurse actors, so no cost was contributed to paying for standardized patients.

Cost-Benefit Analysis/Budget

The cost of this project totaled $2,470 (See Appendix C). The major expense of this project was the cost of the Drexel Simulation conference held in Philadelphia. The simulation conference provided a framework for developing simulations and structured debriefing. Other costs included Survey Monkey at $384. Since this took place in a University setting, regular full-time faculty and Trained Standardized Patient Volunteers helped with the project, including the role of the standardized simulated patient. No outside expenses occurred based on the type of simulation provided.

Methods

The project was designed to provide BSN-PL students with a learning module and simulation-based mental health nursing education experience prior to participating in their

clinical rotation. Participants were also invited to engage in two informal focus groups at week two and week four of their clinical rotation.

Ethical Considerations/Protection of Human Subjects

The DNP student obtained written approval from Davenport University to conduct the quality improvement simulation project prior to applying to University of Massachusetts (UMass) Amherst's Internal Review Board (IRB) (Appendix H). University of Massachusetts IRB approval was obtained before starting the quality improvement project.

Informed consent using the IRB Generalized Consent form was utilized for this quality improvement project (Appendix G). The form outlined who was eligible to participate. BSN-PL sophomore students who were enrolled in Mental Health Didactic and Mental Health Clinical for Winter 2019 were eligible to participate. The form outlined the purpose of the quality improvement project. The form outlined the timeframe for the project, which did not take more than eight hours total to complete, along with 32 hours or four 8-hour clinical days, making a total of 40 hours from learning module to completion of their clinical hours. The form outlined student expectations, including completing a learning module, participating in simulation-based mental health nursing educational experience, completing the post-simulation questionnaire, and participating in two informal focus groups. The benefits of participating were of academic nature and participating in experiential learning environments. There was no monetary gain for participating. The form discussed risks, there were no expected risks associated with this study. The form discussed personal information protection. The students' personal information was protected through the secure servers of Survey Monkey. No payment was provided to participants. Students were encouraged to ask the DNP student if they had any questions.

Student information was protected per the Family Educational Rights and Privacy Act of 1974 (FERPA), as all student information is protected under this law per the university. All information collected during the evaluation of this project will not include any potential patient identifiers.

Implementation.

For this quality improvement project, the NLN Jeffries Simulation Theory and Plan-Do-Study-Act (PDSA) model were utilized. The background for the simulation using the NLN Jeffries Simulation Theory included setting the goals and expectations to design an effective, measurable experience for participants (Jeffries, Rodgers, & Adamson, 2015). The theoretical aspect incorporated important components of the learning objectives for the course, while meeting the aims expected from the project. Furthermore, the design for the simulation had to be developed to include appropriate target objectives for the participants to meet a level of proficiency to feel less anxious and more confident when caring for mental health patients.

The other aspect for implementation was the utilization of the PDSA model. For the PDSA model to work, the DNP student needed to set a goal, determine the stakeholders, and develop the measurement tools necessary to assess if the change led to improvement (Agency for Healthcare Research and Quality, 2008). Once the scientific method was determined and implemented, the DNP student could re-evaluate the process and determine what changes needed to be made to improve and refine the process for future learning.

Planning Step. The "Planning" step involved determining if the project would meet the learning outcomes outlined in the course objectives and benefit the participants by reducing anxiety and improving confidence in caring for patients with mental health disorders. A full

assessment of the clinical course objectives was required. The next step of the planning process included:

- Determining the number of students and what clinical group would participate in the project.
- What mental health disorder would be presented in the simulated experience.
- How the learning module would be developed and presented to the participants to meet the learning objectives.
- What measurement would be utilized to determine if participants learned from the learning module.
- Determining and development of the simulated experience.
- What measurement scales would be utilized to determine anxiety and confidence levels.
- How the participants would access the learning module and measurement scales.
- How the participants information would be protected.
- What types of questions would be asked during the informal focus group meetings and when they should occur.
- How to record the information from the informal focus group meetings.
- Where the simulation and informal focus group meetings would transpire.

Do Step. The "Do" step of the PDSA model addressed each step in the planning phase. The first step encompassed choosing the participants for the project. The project could not be implemented until the winter semester 2019 because of the program's course sequence. The DNP student chose a clinical group based on when the participants would start their clinical rotation. The participants were randomly assigned to the clinical group by the university's advisor and the

DNP student had no knowledge of who the participants were until receiving the list of names at the beginning of the winter 2019 semester.

The second step involved determining what mental health disorder would be used for the simulation. The National Institute of Mental Health (2017) reported that 7.1% of the United States adult population and 13.3% of the adolescent population suffered from at least one episode of major depression in 2017. Since the statistics show that a major portion of the population can suffer from this disorder, the DNP student chose Major Depressive Disorder (MDD) for the simulation. Future nurses, no matter what field they work in, may be exposed to working with patients with MDD at some point in their career, so providing a simulated experience may help nurses feel more confident providing care.

Once the mental health disorder was determined, the DNP student created the learning module and embedded it into BlackBoard. The learning module provided criteria for diagnosing the disorder, differential diagnoses, the nursing process, plan of care, medications to treat the disorder, and effective treatments for treating the disorder. Additionally, the presentation provided information on how to de-escalate patients who are in crisis as a result of symptomology. The DNP student used the textbook for the course, along with the Diagnostic and Statistical Manual for Mental Health Disorders, edition 5 and Crisis Prevention Intervention De-Escalation Tips listed on their website for the development of the learning module. The learning module included a recorded PowerPoint Presentation in Kaltura, which was uploaded to the students' Blackboard shell. Kaltura is a BlackBoard approved application used to present recorded material.

Once the learning module was created, a posttest was generated using Bloom's Taxonomy. Bloom's Taxonomy is a system used to classify different learning objectives and

skills (University of Arkansas, 2018). The taxonomy system provides questions at six different levels (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) evaluation and (6) creativity (University of Arkansas, 2018). Using this system allowed for learning objectives to align with the current curriculum and meet the needs of the participants prior to entering their clinical rotation. The posttest was created in Survey Monkey.

The next step was to create the simulation. The DNP student attended a simulation in nursing conference in May of 2018 to learn how to develop simulation scenarios. Using the concepts learned at this conference, the DNP student created a scenario for MDD with suicidal ideation. It was determined that the best practice for this simulation-based mental health nursing education experience was to provide standardized patient simulation. The simulation was developed to provide participants an interactive experience which measured how the student reacted to the simulation experience, what the student learned from the simulation experience, and how the student will incorporate what they learned in simulation into the clinical environment (Jeffries, Rodgers & Adamson, 2015). As part of the simulation, participants would need to administer a risk assessment evaluation for suicidal behavior, provide education about a medication prescribed to the patient, and administer the medication to the patient using the rights of medication administration. The debriefing component of the simulation included the following questions: (1) in one word, describe how you are feeling; (2) name at least one nursing diagnosis for this patient; (3) What is the primary diagnosis for this patient; (4) what signs and symptoms did the patient exhibit that were of concern; (5) discuss the interventions you implemented as a result of your assessment; (6) how did you prioritize your interventions; (7) what was your priority for this patient; (8) what do you think your strengths were; (9) what areas do you feel you need to improve; (10) if you could do it again, what would you change; (11) what is your

one take away from this experience; (12) is there anything you would like to discuss? The debriefing process is used as a guided reflection tool to help the participants in the process of contemplation and development of critical thinking skills.

Once the simulation and debriefing questions were created, the DNP student needed to provide a way to measure anxiety and confidence. A questionnaire was created in Survey Monkey which included demographic information, the Student Satisfaction and Self-Confidence in Learning Scale (SSSCLS) (Appendix F), and the statement, "I feel less anxious about going to mental health clinical after participating in the Simulation-Based Mental Health Nursing Education Experience." The Student Satisfaction and Confidence in Learning Scale (SSCLS) (Appendix F) was utilized to measure the confidence of students after the simulated experience, the additional statement was used to measure anxiety, and the demographic information included age and gender.

Another area that needed to be addressed was how to protect participant information. The DNP student created a consent form utilizing examples from the UMass Amherst database and incorporating specific content related to the project (Appendix G). Next, the DNP student embedded the learning module in the participant's BlackBoard shell, utilized Survey Monkey to distribute the learning module posttest and post-simulation questionnaire, recorded the informal focus groups using an app called Voice Recorder, then used the Otter app to help with transcription of the recordings. Once the transcription was complete, the voice recordings were deleted to protect participant information. During the transcription, participants were referred to as Participant 1, 2, 3 … this was another measure used to make sure confidentiality was protected during the project implementation. Survey Monkey is a survey tool which includes strict privacy policies and is approved by many different Institutional Review Boards (IRB) for

data collection (Appendix B). Additionally Survey Monkey provided secure transmission links to protect personal information and confidentiality of the participants who participated in this project (Survey Monkey, 2017).

The next area of development was determining the questions that would be asked during the informal focus group meetings. The DNP student developed the following two questions that would be asked at each meeting: (1) did the simulation prepare you for clinical and (2) can the DNP student provide any additional information and learning to help with mental health clinical? The final components during development included scheduling the dates and times for the simulation lab for the simulation and classroom for the informal focus group meetings.

Simulation Experience

Consent. The DNP student met with the participants on their first day of class to discuss the project and provide them with the consent form (Appendix G). The consent form was read to the participants and each participant was given time to ask questions about the project, based on the information given in the consent. The DNP student gave them the disclaimer that they could opt to not participate at any time if they felt uncomfortable. The DNP student also provided a copy of the signed consent to each participant.

Learning Module. The participants were assigned the learning module to be completed before their scheduled simulation day. Participants had access to the learning module, through BlackBoard, on their first day of class. The learning module was embedded in the participants' course BlackBoard shell, for easy access to information. Participants were given clear expectations on how to access the learning module in BlackBoard and the posttest through Survey Monkey. The participants had seven days to complete the learning module and posttest.

Once they completed the learning module, they emailed the DNP student and were given the Survey Monkey link to take the posttest and assigned a time slot for the simulation.

Simulation. For the simulation, each participant was assigned a forty-five minute time slot. Upon arrival, the DNP student provided each participant with the learning objectives of the simulation. Once this was completed, the DNP student left the room and a trained standardized patient volunteer, who played the charge nurse, provided report and background information on the patient and gave the participant access to the patient chart. The participants were then given ten minutes to review the chart, drug book, and risk assessment form that needed to be completed during the patient interview. Once the participant was ready, they entered the simulation room with the trained standardized patient volunteer, who played the patient. The participants were told they had up to twenty minutes to complete their assessment and pass a medication. Participants were given a warning, when five minutes remained. At the conclusion of the simulation the participant, the DNP student, and trained standardized patient volunteers sat together to debrief. The debriefing was scheduled for fifteen minutes. Each participant was asked the same questions during the debriefing. Once the debriefing was completed, the participants were brought into a room with a computer and given access to Survey Monkey to complete the post-simulation questionnaire. Once the participants completed the post-simulation questionnaire, they were able to participate in their mental health clinical rotation as scheduled.

Informal Focus Groups. Once participants started their clinical rotation, they took part in two informal focus group meetings during week two and week four. The informal focus group met for 18 minutes the first time and 14 minutes the second time. Each meeting was recorded for data analysis purposes.

Measurement Instruments

Several measurement instruments were used in this quality improvement project. The learning module posttest was developed from information presented in the PowerPoint presentation. Additionally, Bloom's Taxonomy was utilized to create the questions for the posttest and utilized multiple choice or select all that apply questions. No fill-in the blanks or essay questions were used in this measurement.

For the post-simulation questionnaire, the Student Satisfaction and Self-Confidence in Learning Scale (SSSCLS) (Appendix F) provided a 13-item measurement used to quantify student satisfaction with current learning and self-confidence in learning (National League of Nursing [NLN], 2018). Five of the thirteen questions focused on student satisfaction and eight questions were utilized for the self-confidence portion of the questionnaire. A five-point Likert-scale was used ranging from (1) strongly disagree to (5) strongly agree as the measurement for each question. The NLN (2018) reported the reliability for this testing measurement used Cronbach's alpha, with presence of specific practices were equal to 0.86, and the importance of specific practices was equal to 0.91. With permission from the NLN, the questionnaire was modified on question two and seven to reflect mental health curriculum for the purpose of this project. One additional statement and two demographic questions were added, making the total amount of statements and questions sixteen. The two demographic questions asked about age range and gender, while the additional statement was a direct reflection asking if the simulation helped decrease anxiety about going to clinical. The 16-item questionnaire took less than ten minutes to complete. Each participant received oral instructions about how to complete the questionnaire and were told they did not have to answer any question(s) they were uncomfortable with.

The informal focus groups provided the participants a chance to discuss their experiences with simulation and clinical. The participants provided statements about their feelings, attitudes and beliefs, as well as, suggestions for the use of simulation for future mental health nursing students. Each meeting was recorded using the Voice Recorder app and the recordings were transcribed using the Otter app.

Study Step. The "study" step involved analyzing the data collected from the learning module posttest, the post-simulation questionnaire, and the two informal focus group transcriptions. This allowed for the DNP student to organize the information, evaluate the effectiveness of this project, and determine what changes would need to be made for future learning experiences.

Act Step. The "act" step included changes that could streamline the project implementation for future recommendation for the program. The information gathered from this project was shared with leaders in the nursing program and further assessment will be necessary to determine how and when it will be implemented into the curriculum. It was clear, from the data analysis, that implementation of mental health simulation will be a priority for the program and its effectiveness in preparing nursing students to care for mental health patients.

Data Collection Procedures

Participants took the posttest after reviewing the learning module. Participants were required to contact the DNP student to gain access to Survey Monkey after they watched the PowerPoint presentation. All participants had to complete the posttest before they were given their assigned time slot.

Once the participants engaged in the simulation-based mental health nursing education experience and debriefing process, they were given access to a computer and a link to complete

the 16-item questionnaire. Participants were then permitted to start their mental health clinical rotation as scheduled. In the final phase of the experience, students participated in two informal focus group meetings at week two and week four.

Data Analysis

To analyze the data for this quality improvement project, data from the learning module posttest, post-simulation questionnaire and informal focus groups were evaluated. The learning module post-test was graded on the basis that each question was worth one point. The post-simulation questionnaire incorporated each of the 13 statements from the SSSCLS and the additional statement were given a score from one to five. In this analysis, one was considered a negative response to the statements and five was a positive response to the statements. The mean score was computed for each statement, falling within the range of one and five (Appendix I). Qualitative data was compiled from the informal focus group meetings, which included information for the two questions the DNP student asked and other information brought up by participants related to their experience with the simulation and in the clinical setting.

Since the study only utilized seven students, descriptive statistics gave a simple summary about the sample group and measures provided through the learning module posttest, post-simulation questionnaire and informal focus groups (Web Center for Social Research Methods, 2006). With descriptive statistics, a graphic analysis was presented based on the information provided as listed above.

Results

The DNP project utilized a quality improvement model design to implement a simulation-based mental health education experience into a BSN-PL program at a private university in Michigan. The goal of the quality improvement project was to reduce anxiety by

providing simulation prior to entering the clinical setting and to improve confidence in therapeutic communication and care of mental health patients. The participants included seven students out of a cohort of 34 to represent the population. All participants were enrolled in a Mental Health Didactic course and Mental Health Clinical course. The project began January 7, 2019. Within seven days of the begin date, the participants were given access to and completed the learning module posttest, which was required to be done prior to participating in the simulation. Once participants took part in the simulation, they immediately were given access to the 16-item post-simulation questionnaire on January 16, 2019. Furthermore, this criteria needed to be met before participants could attend their clinical rotation. The participants started their clinical rotation on January 23, 2019. The two informal focus group meetings were held at week two and week four of their mental health clinical rotation. All focus group meetings were completed by February 15, 2019 (Appendix D).

The data analysis was conducted after the last focus group meeting. All data for the project was collected within six weeks of the date of implementation. The data to be reviewed include the learning module posttest, the post-simulation questionnaire, and the information gathered from the two informal focus group meetings.

Results of the Learning Module Posttest. Participants were required to listen to a presentation and take a 12-question multiple choice/select all that apply post-test. All participants answered each question. The posttest statistical outcomes showed a mean score of 87%. The test yielded a low score of 78%, with a majority of students scoring 80% or higher, and an overall high score of 96%. Five of the twelve questions produced a score of less than 80%.

Highest Scoring Questions. Three questions from the posttest were answered correctly by all seven participants. Those questions were questions three, six and twelve. Question three

asked: "What are some risk factors for Major Depressive Disorder? (Select All That Apply)." Question six asked: "What are some characteristics of appearance associated with Major Depressive Disorder? (Select All That Apply)." Question twelve asked: "Which of the following are part of Crisis Prevention Intervention's De-escalation tips? (Select All That Apply)." The three questions were considered knowledge-based questions leveled with Bloom's Taxonomy. Since the participants were considered novice students and at the introductory level, it is expected that students would score higher on knowledge level questions as opposed to levels higher in Bloom's Taxonomy.

Lowest Scoring Questions. Five of the twelve questions yielded a result less than 80%. One question all participants answered incorrectly. The questions which produced the lowest mean scores were questions five, seven, nine, ten, and eleven. Since the questions produced a low mean score, the DNP student will refine the subjects from the learning module for future students to have a higher success rate in understanding the material from the learning module.

Question five. Question five asked: "What is one of two criteria listed by the DSM-V, a patient must have for a diagnosis of Major Depressive Disorder?" All participants answered this question incorrectly. The correct answer was depressed mood. Four of the seven participants chose "Recurrent thoughts of death, recurrent suicidal ideation without a specific plan, or a suicidal attempt or a specific plan for committing suicide." Although this can be one symptom a patient may exhibit, it is not a necessary symptom for the patient to be diagnosed with the disorder. One participant chose the answer "Significant weight loss when not dieting or weight gain (>5% of body weight in 1 month)." Again, this is not a necessary symptom to be diagnosed with the disorder. Finally two participants chose "Psychomotor agitation or retardation nearly every day." With further evaluation, the DNP student will need to better clarify the difference

between having specific symptoms for the diagnosis and what characteristics can be associated with the disorder.

Question seven. Question seven asked "What are some characteristics of affect associated with Major Depressive Disorder? (Select All That Apply)." Four of the seven participants correctly answered this question. Upon further evaluation by the DNP student, medical terminology within the question may have lead participants to not choose the answers blunted or flat. Additionally, these terms may need to be further defined within the learning module for future use.

Question nine. Question nine asks "What is the major adverse effect associated with MAOIs?" Six of the seven participants chose the answer Serotonin Syndrome. The correct answer was Hypertensive Crisis. The DNP student will need to further clarify the learning module to reflect the difference between MAOI's and SSRIs so future students don't get confused by the different adverse effects that may happen with psychotropic medications.

Question eleven. Question eleven asks "What form of therapy involves the placement of a small wire coil on the scalp to conduct an electrical current, creating a magnetic field through the tissues of the head?" Two of the seven participants answered the question incorrectly. Further clarification of the different types of alternative treatments will need to be considered within the learning module.

Median Questions. Questions one, two, four, and eight produced a score of 86%. To achieve this score, one participant did not answer the question correctly. Further evaluation of individual scores may be necessary to see if this was one participant who caused the percentage to fall or if this was randomly distributed between all of the participants. Upon further

evaluation, it may be necessary to assess if any of the information provided in the learning module would need to be revised to meet the needs of future students.

Post-Simulation Questionnaire. Data collected from the Student Satisfaction and Self-Confidence in Learning Scale (SSSCLS) (Appendix F) was utilized to analyze the quality improvement project. In addition to the 13-item measurement questionnaire, two demographic questions were added for review. A final evaluation statement was also included to measure overall anxiety and confidence as it related to the care of mental health patients in the clinical setting. Each of the statements were given a score from one to five. In this analysis, one would be considered a negative response to the statement and five would be considered a positive response to the statement. The mean score was computed for each question, falling within the range of one and five (Appendix I & J).

High Scoring Statements. To be considered a high scoring statement, all participants must select 5-Strongly Agree on the Likert scale, making the mean average 5. The following statements met the criteria: statements one, five, seven, eight, and nine. Statement one read "The teaching methods used in this simulation were helpful and effective." Statement five read "The way my instructor(s) taught the simulation was suitable to the way I learn." Statement seven read "I am confident that this simulation covered critical content necessary for the mastery of mental health curriculum." Statement eight read "I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting." Statement nine read "My instructor(s) used helpful resources to teach the simulation." The scores indicated that participants strongly agreed that the teaching methods for the simulation were beneficial and provided value to their experience. Furthermore, the participants

agreed that the information and tools presented in the simulation enhanced their learning for their course and clinical.

Median Scoring Statements. Six statements met the criteria for median scoring. Those statements reflected a mean average range of 4.71 to 4.86. Statements two, three, six, ten, eleven, and twelve met the mean average listed.

Statements two, three, ten and eleven. Each statement reflected a mean score of 4.86. Statement two stated "The simulation provided me with a variety of learning materials and activities to promote my learning of the mental health curriculum." Statement three stated "I enjoyed how my instructor(s) taught the simulation." Statement ten stated "It is my responsibility as the student to learn what I need to know from this simulation activity." Statement eleven stated "I know how to get help when I do not understand the concepts covered in the simulation." To achieve a mean score of 4.86, six participants answered 5-strongly agree and one participant answered 4-agree with each statement.

Statement six and twelve. Each statement reflected a mean score of 4.71. Statement six stated "I am confident that I am mastering the content of the simulation activity that my instructor(s) presented to me." Statement twelve stated "I know how to use simulation activities to learn critical aspects of these skills." To achieve a mean score of 4.71, five participants answered 5-strongly agree and two participants answered 4-agree with each statement.

Low Scoring Statements. For this quality improvement project, to be considered a low scoring statement the mean average score fell between 4.0 and 4.57. Statements four, thirteen, and fourteen met this criteria.

Statement four. Statement four had a mean score of 4.57. Statement four stated "The teaching materials used in this simulation were motivating and helped me to learn." To receive a

mean score of 4.57, 4 participants answered 5-strongly agree and 3 participants answered 4-agree to the statement. Although the mean average is a lower score, the results indicated the participants found value in the simulation and learned from the experience.

Statement thirteen. Statement thirteen had a mean score of 4.29. Statement thirteen stated "It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time." To receive a mean score of 4.29, three participants answered 5-strongly agree, three participants answered 4-agree, and one participant answered 3-undecided neither agree nor disagree. Majority of the participants agreed with the statement, but further reflection will be necessary to determine if restructuring the simulation or pre-simulation materials should be considered to improve the confidence of this statement.

Statement fourteen. Statement fourteen had a mean score of 4.0. Statement fourteen stated "I feel less anxious about going to mental health clinical after participating in the Simulation-Based Mental Health Nursing Education Experience." To receive a mean score of 4.0, four participants answered 5-strongly agree, one participant answered 4-agree, and two participants answered 2-disagree. Since there were two participants who did not agree with the statement, further evaluation of the simulation should be considered. Since the goal of the simulation-based mental health nursing education experience was to decrease anxiety and build confidence in therapeutic relationships and treatment of mental health patients and two of the seven participants did not express less anxiety, a gap still existed. Further investigation of why the participants still felt anxiety was explored in the informal focus group meetings. One participant stated that their anxiety wasn't as bad, but there is always some anxiety entering a clinical setting they are not familiar with. To address this, it may be warranted to measure the

degree of anxiety in students prior to the simulation, then again after the simulation to determine to what degree does anxiety lessen after the simulation.

Demographics. Two demographic questions were provided in the questionnaire. The first question addressed gender, revealing all seven participants were female. The second question addressed age groups. One participant fell in the 18-20 year old range, three in the 21-29 year old range, and 3 in the 30-39 year old range.

Results of the Two Informal Focus Group Meetings. The two informal focus group meetings provided statements from the participants regarding their experience with the simulation and feelings about their clinical rotation. A systematic analysis was completed for both sessions. The systematic analysis provided a strategy to document, recognize and articulate what the participants gained from engaging in the simulation-based mental health nursing education experience. The goal of the analysis was to verify findings and provide evidence to support implementing this capstone project into practice. Characteristics that were analyzed during the informal focus group meetings included monitoring for: (1) spontaneous comments, (2) participants changing their minds, (3) participants repeating comments or commenting with intense emotion, and (4) wandering conversations. The purpose of evaluating these characteristics was to determine if the participants had fully determined their opinions or were influenced by others; investigate why some participants changed their minds; assess participants who repeated their comments to determine if the participant was heard or needed validation of their opinion; and redirect conversations that progressed off topic.

The DNP student used an abridged transcript during the analysis of the informal focus group meetings. The use of the abridged transcript allowed for the DNP student to prioritize themes which emerged during the sessions (Fink, 2015). The themes were prioritized in a

spreadsheet by frequency of a mentioned topic, how many people mentioned a topic, how much emotion was given to a topic, who much detail was provided about a topic, consistency in the views of a topic, and the perception of importance of a topic. The DNP student also utilized the constant comparative framework to determine how the themes correlated to one another. The constant comparative framework or Grounded Theory helps to determine a topic of interest by identifying concepts, principles or processes (Robert Wood Johnson Foundation, 2008). The use of this theory is pragmatic in this project since it can be used in practical application and help provide assessment of behavior (Glaser & Strauss, 1967). One of the key aspects of this framework is that it allows for comparison of different concepts to identify related and unrelated characteristics (Robert Wood Johnson Foundation, 2008).

Two major themes evolved from the informal focus groups. First, all the students verbalized and agreed that the simulation experience was beneficial and they felt less anxious about attending clinical. One participant stated “I wasn’t free of anxiety, there’s always a bit of anxiety when walking into a new environment.” Although participants agreed they were still somewhat anxious about attending clinical, they were more comfortable and confident interacting with the patients. Another participant talked about being more prepared to use the risk assessment because she had to perform the task. She stated “I probably wouldn’t have gone over it prior to clinical had I not had to do it.” They all agreed they felt less anxious asking their patients questions from the risk assessment since they had practiced it in the simulation. In addition, participants believed that they were given the opportunity to get a more one-on-one experience with the patient in the simulation than they did in the clinical environment and that was beneficial. Overall, the participants stated the simulation-based mental health nursing education experience should be integrated into the program for all nursing students.

The second theme centered on modeling. Modeling is defined as "the acquiring and learning of a new skill by observing and imitating that behavior as performed by another individual" (Farlex, 2019). Participants suggested modeling could be performed by a senior nursing student or by a faculty facilitator to demonstrate how they would provide care to a patient. This would have given them more confidence when participating in the simulation, since they had so little experience with patient care prior to this clinical rotation. One of the participants stated "Watching the … do it, helped me put it all together and I felt more confident talking to my patients." All the participants used verbal and nonverbal affirmations that modeling would be an effective tool for students prior to their first simulation.

Interpretation/Discussion

This quality improvement project centered on incorporating simulation in mental health for nursing students. The NCSBN defines simulation as a "technique, not a technology, to replace or amplify real experiences that evoke or replicate substantial aspects of the real world in a fully interactive manner" (Gaba, 2004). The review of literature suggests that simulation provides nursing students a safe environment to practice providing care to patients. Furthermore, anxiety of students prior to their mental health clinical experience, is decreased by reflecting on the care they provided to patients in the simulation, practicing therapeutic communication with simulated mental health patients, and receiving feedback from their instructor(s) and peers. If simulation is created to meet learning objectives of the course and teach students at the appropriate level of education, it can provide students with an increased level of confidence when having to perform that kind of care on patients in the clinical setting. By utilizing simulation in mental health, it can help decrease the level of anxiety students may have based on

bias, stereotype, and previous experience. Furthermore, by increasing confidence and decreasing anxiety, students may be more accepting of pursuing a career in the mental health field.

Implementation of NLN Jeffries Simulation Theory. The DNP student used the NLN Jeffries Simulation theory to help develop the simulation-based mental health nursing education experience. The learning objectives developed for the simulation integrated nursing tasks, critical thinking concepts, and problem-solving abilities. Additionally, the environment for the simulation mimicked a common room in a mental health setting. Moulage was used to help replicate the look of a patient who was sleep deprived and had been losing weight. Directions were given to the simulated patient on how to act, what to say, how to dress, along with a challenge question to ask sometime within the simulation. The purpose of providing these characteristics was to create a realistic environment for the participants to provide nursing care. During the development of the simulation, debriefing strategies were created to help the participants reflect on their experience during the simulation and how to learn from their actions.

Data Analysis. The data analysis from this quality improvement project suggests implementation of a simulation-based mental health nursing education experience should be further evaluated (Appendix H, I, & J). The overall experience was well received by the participants, as they signified that the experience was valuable in learning. Since the project only utilized seven students, a larger sample group should be considered to strengthen the results of the simulated experience.

Learning Module Posttest. Data analysis yielded a summary about the sample group and the measures provided through the learning module, observation of the simulation and questionnaire (Web Center for Social Research Methods, 2006). The posttest results from the learning module identified the following as the questions most frequently missed: “What is one

of the two criteria listed by the DSM-V, a patient must have for a diagnosis of Major Depressive Disorder?"; "What are some of the characteristics of affect associated with Major Depressive Disorder (Select All That Apply)"; "What is the major adverse effect associated with MAOIs?"; and "What treatment can be used for resistant Major Depressive Disorder?" (Appendix H). Upon review of the learning module, participants were provided this information, but seemed to have difficulty retaining the concepts. The DNP student will need to further identify if the questions were too complex for students at their level of education and determine if changes need to be made if this project will be implemented into the program. Another consideration would be to provide a pre-test for the learning module, as one was not created prior to the simulation-based mental health nursing education experience because of the time frame participants needed to complete the learning module and simulation before entering their clinical rotation. Additionally adjustments would need to be made in subsequent groups to allow enough time for participation in all aspects of the learning module.

Post-Simulation Questionnaire. The post-simulation questionnaire provided insight into whether or not the participants felt less anxious about going to clinical after engaging in the simulation and more confident in providing therapeutic communication and care to mental health patients. The measurement tool for this questionnaire included the SSSCLS for confidence and an evaluative statement for anxiety. The anxiety statement revealed two participants disagreed with the statement "I feel less anxious about going to mental health clinical after participating in the simulation-based mental health nursing education experience." (Appendix I). Further evaluation of the level of anxiety prior to the simulation about clinical and after the simulation about clinical may be considered for future implementation of the project. Confidence levels were evaluated with majority of the statements reflecting either a strongly agree or agree answer

from the participants. These measures presented evidence that the group felt the simulation-based mental health nursing education experience provided a value to the learning environment for the participants. Another point of reference to consider, pertaining to the participants, was their age. The participants who disagreed with the above statement also listed their age in the 18-20 year old and 21-29 year old age range (Appendix I). Since these participants were younger than some of the others, it would be beneficial to explore if the reasons these participants were more anxious about the mental health clinical experience was related to less exposure or experience working with patients who have mental illness.

Focus Groups. The focus group meetings for the simulation-based mental health education experience met during week two and four of their clinical rotation. After analysis of the abridged transcript, two major themes arose from the focus groups. The first theme centered on the participants' experience with anxiety and confidence in simulation, while the other focus was the use of modeling. Since the participants agreed that the simulation decreased their overall anxiety and increased their confidence in communicating with their patients, further consideration of implementing this quality improvement project should be considered. Another area of consideration that should be explored was modeling. The participants expressed they would have felt more comfortable with the simulation had there been some form of modeling. Modeling would have provided the participants with a demonstration of the verbal and non-verbal cues patients and health care providers exchange during care and how to perform the risk assessment and other pertinent assessments determined by the simulation. Since these participants did not have much clinical experience, modeling may be beneficial, along with simulation, to decrease anxiety and build confidence in nursing students. Patricia Benner developed the Novice to Expert concept. A novice nurse is someone who has no experience and

has only been taught fundamental tasks (Petiprin, 2016). Novices normally are task driven and do not have the experience to deviate from the task (Petiprin, 2016). The participants in this project would be considered novices, since the participants are so new to nursing, modeling would be beneficial to demonstrate how to communicate with the patient and perform all the tasks assigned. Overall, further exploration of the use of modeling prior to simulation for novice nursing students should be measured.

Quality Improvement Recommendations. Informal focus group analysis, questionnaire analysis, and graphic analysis (Appendix H, I, & J) supported additional assessment of implementation of a simulation-based mental health nursing education experience for BSN-PL students prior to entering their mental health clinical rotation. Implementing this simulation experience would provide students and faculty evidence for best practices and time for remediation prior to providing care for patients with mental health issues. The simulation-based mental health nursing education experience will be recommended for implementation into the BSN-PL program. The quality improvement project meets the key performance indicators of the university and will provide the evidence necessary to support full implementation into the nursing program.

Conclusion

Nursing students often express anxiety related to their mental health nursing clinical rotation. Many factors may contribute to this feeling including bias, stereotype, fear of the unknown, and or previous experience. The goals for this quality improvement project were to decrease anxiety and to improve confidence in therapeutic relationships and treatment of mental health patients. These clinical questions were considered during the course of this project: “Will a learning module and simulation decrease anxiety among nursing students prior to entering

clinical and increase confidence in providing therapeutic communication and treatment of patients with mental health problems?" Based on the data analysis, the answers to these questions are yes.

During the course of the simulation-based mental health nursing education experience, the participants gained greater knowledge of caring for patients with Major Depressive Disorder. Therefore, providing students with experiential learning may help to increase confidence in the clinical setting. Students will be better prepared to provide care and more effectively communicate with mental health patients before being exposed to them in the clinical setting. Modeling should be considered since students have had minimal exposure to patients in the clinical setting. The sample size for this project was small, so it was not a true representation of the population, so further analysis is needed to determine if this project should be implemented into other nursing programs.

The review of literature provided evidence to support experiential learning as a means to decrease anxiety and increase confidence in the clinical setting. Experiential learning is considered a process where students learn through non-traditional experiences (University of Colorado – Denver, 2019). In this case, traditional learning is learning in the clinical setting and experiential learning is learning through simulation. Therefore, by introducing simulation using standardized patients, students can learn about specific mental health disorders, how to read non-verbal and verbal cues when treating patients, and how to therapeutically communicate with patients before participating in a therapeutic professional relationship.

For this quality improvement project the DNP student determined that by providing a pre-learning experience such as a learning module can help students prepare for the simulation experience they will be participating in. This gives students more confidence because they have

background information about the simulation they will be engaging in. Utilizing a pre and posttest for the learning module will help the instructor determine if any areas need to be reinforced so students understand the material and are meeting the learning objectives. The simulation should identify specific outcomes so the student's participation can be measured and reflected upon during the debriefing process. Students must also be informed of the learning objective and specific outcomes so they know what is expected of them in the simulated setting.

The data collected during this quality improvement project suggests that implementation of a simulation-based mental health nursing education experience would be beneficial for nursing students. The quantitative data from the learning module posttest and post-simulation questionnaire support that a learning module and simulation experience can help improve confidence in learning and decrease anxiety when caring for mental health patients. The qualitative data collected from the informal focus groups also suggest that the participants felt more comfortable in the clinical setting after participating in the quality improvement project.

One area that needs to be considered for this simulation-based mental health nursing education experience is the need to incorporate modeling for students who have had minimal experience providing care to patients. In this case, students were in their second semester of their nursing classes. They only had six eight hour shifts working with patients in the clinical setting prior to enrolling in their mental health clinical. Therefore, the use of modeling can provide students an example of how to communicate verbally and non-verbally with patients who have mental health issues. This may lead to less anxiety and more confidence, even in the simulation, for students to provide care to their patients.

Another consideration would be to provide two simulated experiences. The first experience would be provided prior to entering their clinical rotation and the other would happen

either at the end or at least half way through their clinical rotation. This would allow for the opportunity to compare how far students have come in their assessments and care of patients with mental health disorders.

Barriers that should be considered is that simulation for individual students can be time consuming. It takes time to develop new learning modules and simulations necessary for the students to meet the learning objectives of the course. Additionally, scheduling the amount of students for simulation prior to them starting their clinical rotation may be difficult since mental health clinical placement can be difficult to secure and the cohorts can be large in size. This can lead to some students having to start their clinical rotation prior to receiving the simulation. Another barrier is training faculty to be proficient in providing the simulation and cost to hire simulated patients.

In summary, the participants of this quality improvement project relayed that they felt less anxious about starting their mental health rotation and more confident in communicating and providing care to their patients after the implementation of the project. Additionally, through analysis from this project implementation, a simulation-based mental health nursing education experience should be considered, at least for further analysis, for possible implementation into BSN-PL programs.

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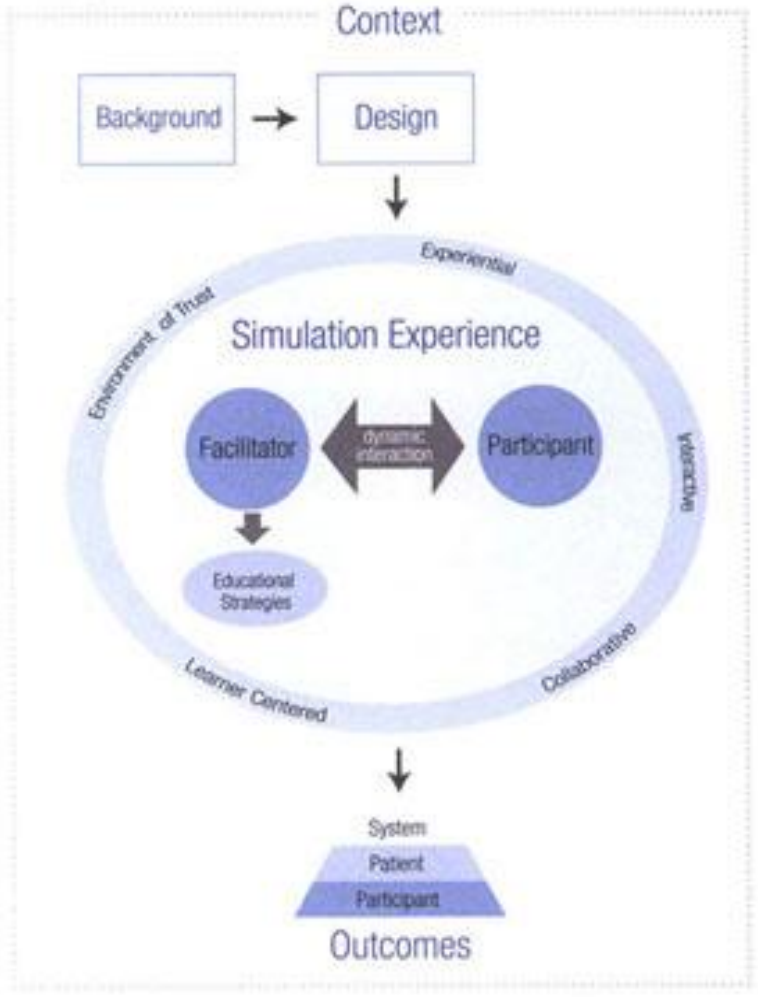
Appendix A

NLN Jeffries Simulation Theory Figure

Figure: NLN Jeffries Simulation Theory



Appendix B

Survey Monkey Permission Form

SurveyMonkey

SurveyMonkey Inc.
www.surveymonkey.com

For questions, visit our Help Center
help.surveymonkey.com

Re: Permission to Conduct Research Using SurveyMonkey

To whom it may concern:

This letter is being produced in response to a request by a student at your institution who wishes to conduct a survey using SurveyMonkey in order to support their research. The student has indicated that they require a letter from SurveyMonkey granting them permission to do this. Please accept this letter as evidence of such permission. Students are permitted to conduct research via the SurveyMonkey platform provided that they abide by our Terms of Use, a copy of which is available on our website.

SurveyMonkey is a self-serve survey platform on which our users can, by themselves, create, deploy and analyze surveys through an online interface. We have users in many different industries who use surveys for many different purposes. One of our most common use cases is students and other types of researchers using our online tools to conduct academic research.

If you have any questions about this letter, please contact us through our Help Center at help.surveymonkey.com.

Sincerely,

SurveyMonkey Inc.

Appendix C

Cost Analysis

Cost Analysis	
Non-Recurring Costs	
Drexel Simulation Conference	$1999
Transportation	$87
Cost of the simulation lab	$0
Cost of Faculty	$0
Survey Monkey	$384
No other direct costs	
Total	$2470

Appendix D

Timeline

Table 1

Task	October	November	December	January	February	March	April
IRB Reviews	X						
Recruitment of eligible participants				X			
Intervention; Evaluation;				X	X	X	
Post-test and Analysis of outcomes						X	
Results presented to University of Massachusetts Amherst and Davenport University						X	X

Appendix E

Consent from NLN to use the Student Satisfaction and Self-Confidence in Learning Questionnaire

NLN
National League for Nursing

The Voice of Nursing Education

Tools and Instruments

Use of NLN Surveys and Research Instruments

The NLN's copyrighted surveys and research instruments are an important part of its research activities.

Permission for non-commercial use of surveys and research instruments (includes, theses, dissertations, and DNP projects) is granted free of charge. Available instruments may be downloaded and used by individual researchers for non-commercial use only with the retention of the NLN copyright statement. **The researcher does not need to contact the NLN for specific permission**. In granting permission for non-commercial use, it is understood that the following caveats will be respected by the researcher:

1. It is the sole responsibility of the researcher to determine whether the NLN research instrument is appropriate to her or his particular study.
2. Modifications to a survey/instrument may affect the reliability and/or validity of results. Any modifications made to a survey/instrument are the sole responsibility of the researcher.
3. When published or printed, any research findings produced using an NLN survey/instrument must be properly cited. If the content of the NLN survey/instrument was modified in any way, this must also be clearly indicated in the text, footnotes and endnotes of all materials where findings are published or printed.

Permission for commercial use of NLN surveys and research instruments must be obtained from the NLN. Commercial use includes publishing in journals, books, or inclusion in any product that is sold. Please submit a written request to copyrightpermission@nln.org. In most instances, requests for permission are reviewed within 4 weeks of their receipt.

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The Voice for Nursing Education

NLN
National League for Nursing

Appendix F

NLN Student Satisfaction and Self-Confidence in Learning Questionnaire

Student Satisfaction and Self-Confidence in Learning

Instructions: This questionnaire is a series of statements about your personal attitudes about the instruction you receive during your simulation activity. Each item represents a statement about your attitude toward your satisfaction with learning and self-confidence in obtaining the instruction you need. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the numbers that best describe your attitude or beliefs. Please be truthful and describe your attitude as it really is, not what you would like for it to be. This is anonymous with the results being compiled as a group, not individually.

Mark:
1 = STRONGLY DISAGREE with the statement
2 = DISAGREE with the statement
3 = UNDECIDED - you neither agree or disagree with the statement
4 = AGREE with the statement
5 = STRONGLY AGREE with the statement

Satisfaction with Current Learning	**SD**	**D**	**UN**	**A**	**SA**
1. The teaching methods used in this simulation were helpful and effective.	O 1	O 2	O 3	O 4	O 5
2. The simulation provided me with a variety of learning materials and activities to promote my learning the medical surgical curriculum.	O 1	O 2	O 3	O 4	O 5
3. I enjoyed how my instructor taught the simulation.	O 1	O 2	O 3	O 4	O 5
4. The teaching materials used in this simulation were motivating and helped me to learn.	O 1	O 2	O 3	O 4	O 5
5. The way my instructor(s) taught the simulation was suitable to the way I learn.	O 1	O 2	O 3	O 4	O 5
Self-confidence in Learning	**SD**	**D**	**UN**	**A**	**SA**
6. I am confident that I am mastering the content of the simulation activity that my instructors presented to me.	O 1	O 2	O 3	O 4	O 5
7. I am confident that this simulation covered critical content necessary for the mastery of medical surgical curriculum.	O 1	O 2	O 3	O 4	O 5
8. I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting	O 1	O 2	O 3	O 4	O 5
9. My instructors used helpful resources to teach the simulation.	O 1	O 2	O 3	O 4	O 5
10. It is my responsibility as the student to learn what I need to know from this simulation activity.	O 1	O 2	O 3	O 4	O 5
11. I know how to get help when I do not understand the concepts covered in the simulation.	O 1	O 2	O 3	O 4	O 5
12. I know how to use simulation activities to learn critical aspects of these skills.	O 1	O 2	O 3	O 4	O 5
13. It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time..	O 1	O 2	O 3	O 4	O 5

 Revised December 22, 2004

Appendix G

Focus Group Consent

Consent Form for Participation in a Quality Improvement Simulation Project

University of Massachusetts Amherst

DNP Project Coordinator: **Deanna Dubay DNP Student**

Project Title: **Quality Improvement Simulation Project**

---

1. What is this form?

"This form is called a Consent Form. It will give you information about the project so you can make an informed decision about participation in this project implementation."

2. WHO IS ELIGIBLE TO PARTICIPATE?

Inclusion criteria includes: (a) nursing students in their sophomore year who are enrolled in mental health nursing didactic and clinical, (b) participants must be at least 18 years of age, and (c) students must have passed their first semester of nursing classes.

3. WHAT IS THE PURPOSE OF THIS Project?

The purpose of this project implementation is to aid students, by providing a learning module, Simulation-Based Mental Health Nursing Education Experience and informal focus groups during their mental health clinical rotation, to decrease anxiety and improve confidence in therapeutic relationships and treatment of mental health patients.

4. WHERE WILL THE Project TAKE PLACE AND HOW LONG WILL IT LAST?

The Quality Improvement Simulation Project will be on January 7, 2019 at Davenport University located in Midland, Michigan. The clinical placement will be determined when classes are scheduled. The participant will be required to spend up to 2 hours per session for a total of 4 sessions and 32 hours (4 8-hour days) for their clinical rotation. The sessions are defined as the Learning Module, Simulation-Based Mental Health Nursing Education Experience (including taking an online survey) and 2 Informal Focus Groups. Total time involved will be 40 hours.

5. WHAT WILL I BE ASKED TO DO?

"If you agree to take part in this project implementation, you will be asked to complete a learning module, participate in a Simulation-based Mental Health Nursing Education Experience, Completing an online survey, participating in 2 informal focus groups during week 2 and week 4 of your mental health clinical rotation.

The learning module will consist of an online PowerPoint Presentation about Major Depressive Disorder, including the criteria for diagnosing the disorder and differential diagnosis, the nursing process, medications and effective therapies for treating the disorder. Additionally, the presentation will also provide information on how to de-escalate patients who are in crisis as a result of symptomology. Students will receive a post-test, which will be leveled according to Bloom's Taxonomy. Next participants will participate in the Simulation-Based Mental Health Nursing Experience using a standardized patient. The students will receive a briefing prior to the entering the simulation, participate in the simulation for up to 20 minutes and the participate in a structured debriefing session. After the debriefing, participants will be given time in the computer lab to complete an online survey about student satisfaction, self-confidence, and anxiety. Students will then participate in 4 weeks of mental health clinical. During week 2 and week 4, participants will partake in an informal focus group. The same two questions will be asked at each meeting (1) Did the simulation help prepare you for mental health clinical and (2) is there anything else I can do to help?

The Student Satisfaction and Self-Confidence in Learning Scale from the National League of Nursing will be utilized for the survey, as well as one question stating "I feel less anxious about going to mental health clinical after participating in the Simulation-Based Mental Health Nursing Education Experience." Minimal demographic information will be asked on the survey to include age and gender. "You may skip any question you feel uncomfortable answering."

6. What are my benefits of being in this Project?

You may not directly benefit from this quality improvement simulation project; however, we hope that your participation in the study may ***help determine if simulation will reduce anxiety prior to entering a mental health clinical rotation and increase confidence in assessing and communicating with mental health patients***.

7. WHAT ARE my RISKS OF being in THIS Project?

"We believe there are no known risks associated with this project implementation; however, a possible inconvenience may be the time it takes to participate in the project implementation.

8. How will my personal information be protected?

We believe there are no known risks associated with this project implementation; however, as with any online related activity the risk of a breach of confidentiality is always possible. To the best of our ability your answers in this survey will remain confidential. We will minimize any risks by utilizing Survey Monkey. Your survey answers will be sent to a link at SurveyMonkey.com where data will be stored in a password protected electronic format. Survey Monkey does not collect identifying information such as your name, email address, or IP address. Therefore, your responses will remain anonymous. No one will be able to identify you or your answers, and no one will know whether or not you participated in the study. Your participation in this study is completely voluntary and you can withdraw at any time. You are free to skip any question that you choose.

Your name or information will not be revealed in any documents related to this project implementation.

At the conclusion of this project implementation, the project coordinator may publish their findings. Information will be presented in summary format and you will not be identified in any publications or presentations."

10. WHAT IF I HAVE QUESTIONS?

"Take as long as you like before you make a decision. We will be happy to answer any question you have about this study. If you have further questions about this project or if you have a project-related problem, you may contact Deanna Dubay at 989-794-1943. If you have any questions concerning your rights as a project participant, you may contact the University of Massachusetts Amherst Human Research Protection Office (HRPO) at (413) 545-3428 or humansubjects@ora.umass.edu."

11. CAN I STOP BEING IN THE Project?

"You do not have to be a participant in this project if you do not want to. If you agree to be a participant, but later change your mind, you may drop out at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate."

12. WHAT IF I AM INJURED?

"The University of Massachusetts does not have a program for compensating participants for injury or complications related the project implementation, but the project coordinator will assist you in getting treatment."

13. SUBJECT STATEMENT OF VOLUNTARY CONSENT

"When signing this form I am agreeing to voluntarily enter this quality improvement simulation project. I have had a chance to read this consent form, and it was explained to me in a language which I use and understand. I have had the opportunity to ask questions and have received satisfactory answers. I understand that I can withdraw at any time. A copy of this signed Informed Consent Form has been given to me."

_____	_____	_____
Participant Signature:	Print Name:	Date:

By signing below I indicate that the participant has read and, to the best of my knowledge, understands the details contained in this document and has been given a copy.

_____	_____	_____
Signature of Person Obtaining Consent	Print Name:	Date:

Appendix H

Learning Module Post-Test Results Number of Participants (n=7)			
Questions	Percent Correct	Average Score	Standard Deviation
What is the first-line medication treatment for Major Depressive Disorder?	86	0.9/1.0 (86%)	0.38
Who is more likely to suffer from Major Depressive Disorder	86	0.9/1.0 (86%)	0.38
What are some risk factors for Major Depressive Disorder? (Select All That Apply)	100	4.0/4.0	0.0
What are some signs and symptoms of Major Depressive Disorder? (Select All That Apply)	86	4.9/5.0 (97%)	0.38
What is one of two criteria listed by the DSM-V, a patient must have for a diagnosis of Major Depressive Disorder?	0	0.0/1.0 (0%)	0.00
What are some characteristics of appearance associated with Major Depressive Disorder? (Select All That Apply).	100	3.0/3.0 (100%)	0.0
What are some characteristics of affect associated with Major Depressive Disorder? (Select All That Apply).	57	4.6/5.0 (91%)	0.53
What is the number one thing we are concerned with for a	86	0.9/1.0 (86%)	0.38

patient with Major Depressive Disorder?			
What is the major adverse effect associated with MAOIs?	14	0.1/1.0 (14%)	0.38
What treatment can be used for resistant Major Depressive Disorder?	57	0.6/1.0 (57%)	0.53
What form of therapy involves the placement of a small wire coil on the scalp to conduct an electrical current, creating a magnetic field through the tissues of the head?	71%	0.7/1.0 (71%)	0.49
Which of the following are part of Crisis Prevention Intervention's De-escalation tips? (Select All That Apply)	100	3.0/3.0 (100%)	0.00
Total	**87**		**7%**

Appendix I

Post-Simulation Questionnaire

Post-Simulation Questionnaire: **Student Satisfaction and Self-Confidence in Learning** **Evaluation Statement** **Demographics** Number of Participants (n=7)					
Statement	**Strongly Disagree with the Statement**	**Disagree with the Statement**	**Undecided – Neither Agree or Disagree with the Statement**	**Agree with the Statement**	**Strongly Agree with the Statement**
The teaching methods used in this simulation were helpful and effective.	0%	0%	0%	0%	100%
The simulation provided me with a variety of learning materials and activities to promote my learning of the mental health curriculum.	0%	0%	0%	14.29%	85.71%
I enjoyed how my instructor(s) taught the simulation.	0%	0%	0%	14.29%	85.71%
The teaching materials used in this simulation were motivating and helped me to learn.	0%	0%	0%	42.86%	57.14%

The way my instructor(s) taught the simulation was suitable to the way I learn.	0%	0%	0%	0%	100%
I am confident that I am mastering the content of the simulation activity that my instructor(s) presented to me	0%	0%	0%	28.57%	71.43%
I am confident that this simulation covered critical content necessary for the mastery of mental health curriculum.	0%	0%	0%	0%	100%
I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting.	0%	0%	0%	0%	100%
My instructor(s) used helpful resources to teach the simulation.	0%	0%	0%	0%	100%

It is my responsibility as the student to learn what I need to know from this simulation activity.	0%	0%	0%	14.29%	85.71%
I know how to get help when I do not understand the concepts covered in the simulation.	0%	0%	0%	14.29%	85.71%
I know how to use simulation activities to learn critical aspects of these skills.	0%	0%	0%	28.57%	71.43%
It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time.	0%	0%	14.29%	42.86%	42.86%
Evaluation Statement Number of Participants (n=7)					
I feel less anxious about going to mental health clinical after participating in the Simulation-Based Mental Health Nursing Education Experience.	0%	28.57%	0%	14.29%	57.14%

Demographic Information Number of Participants (n=7)					
What is your gender?	Female = 100%	Male = 0%			
What is your age?	18-20 = 14.29%	21-29 = 42.86%	30-39 = 42.86%		

Appendix J

Results of Student Satisfaction and Self-Confidence in Learning Statement Questionnaire

The teaching methods used in this simulation were helpful and effective.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	100.0	100.0	100.0

The simulation provided me with a variety of learning materials and activities to promote my learning of the mental health curriculum

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	1	14.3	14.3	14.3
	Strongly Agree	6	85.7	85.7	100.0
	Total	7	100.0	100.0	

I enjoyed how my instructor(s) taught the simulation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	1	14.3	14.3	14.3
	Strongly Agree	6	85.7	85.7	100.0
	Total	7	100.0	100.0	

The teaching materials used in this simulation were motivating and helped me to learn

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	3	42.9	42.9	42.9
	Strongly Agree	4	57.1	57.1	100.0
	Total	7	100.0	100.0	

The way my instructor(s) taught the simulation was suitable to the way I learn

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	100.0	100.0	100.0

I am confident that I am mastering the content of the simulation activity that my instructor(s) presented to me.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	2	28.6	28.6	28.6
	Strongly Agree	5	71.4	71.4	100.0
	Total	7	100.0	100.0	

I am confident that this simulation covered critical content necessary for the mastery of mental health curriculum

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	100.0	100.0	100.0

I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	100.0	100.0	100.0

My instructor(s) used helpful resources to teach the simulation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	7	100.0	100.0	100.0

It is my responsibility as the student to learn what I need to know from this simulation activity.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	1	14.3	14.3	14.3
	Strongly Agree	6	85.7	85.7	100.0
	Total	7	100.0	100.0	

I know how to get help when I do not understand the concepts covered in the simulation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	1	14.3	14.3	14.3
	Strongly Agree	6	85.7	85.7	100.0
	Total	7	100.0	100.0	

I know how to use simulation activities to learn critical aspects of these skills.

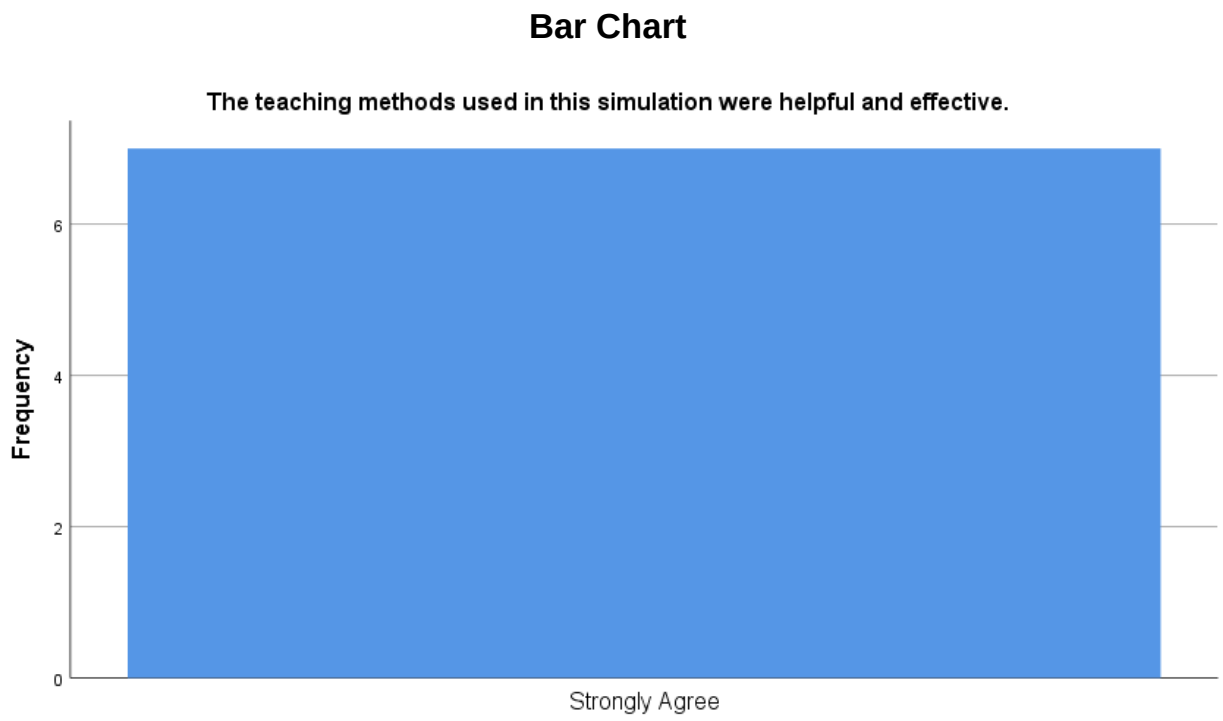
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	2	28.6	28.6	28.6
	Strongly Agree	5	71.4	71.4	100.0
	Total	7	100.0	100.0	

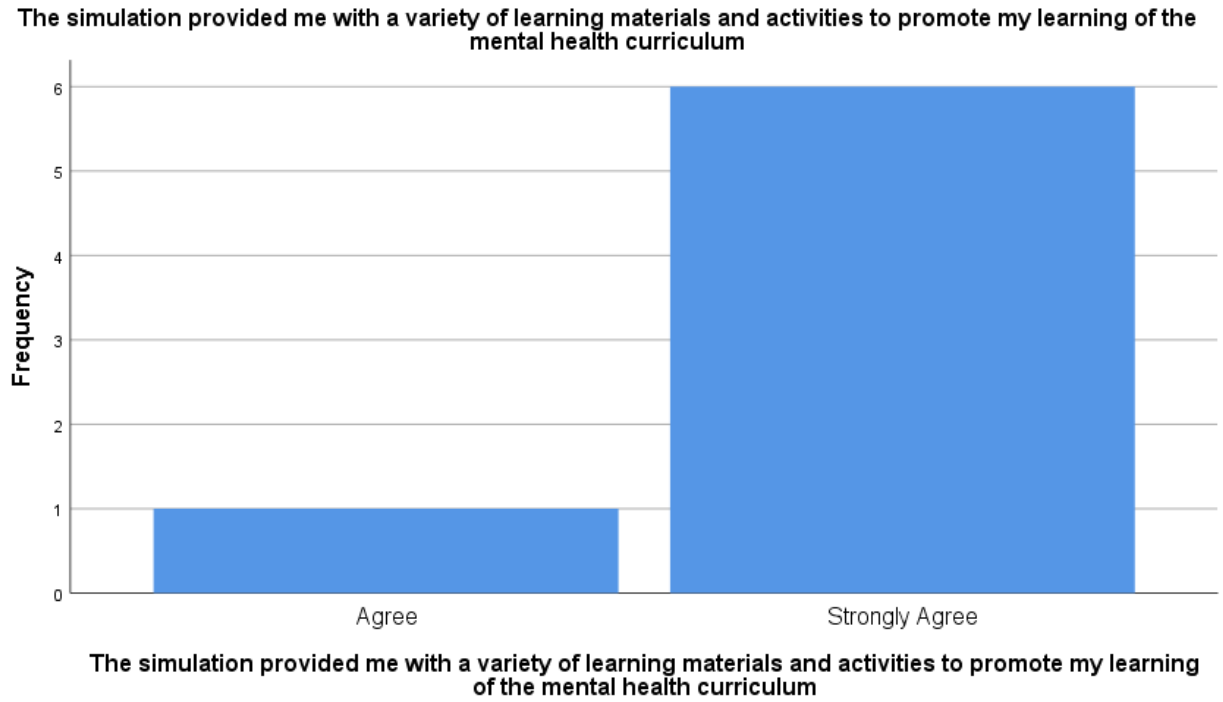
It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time.

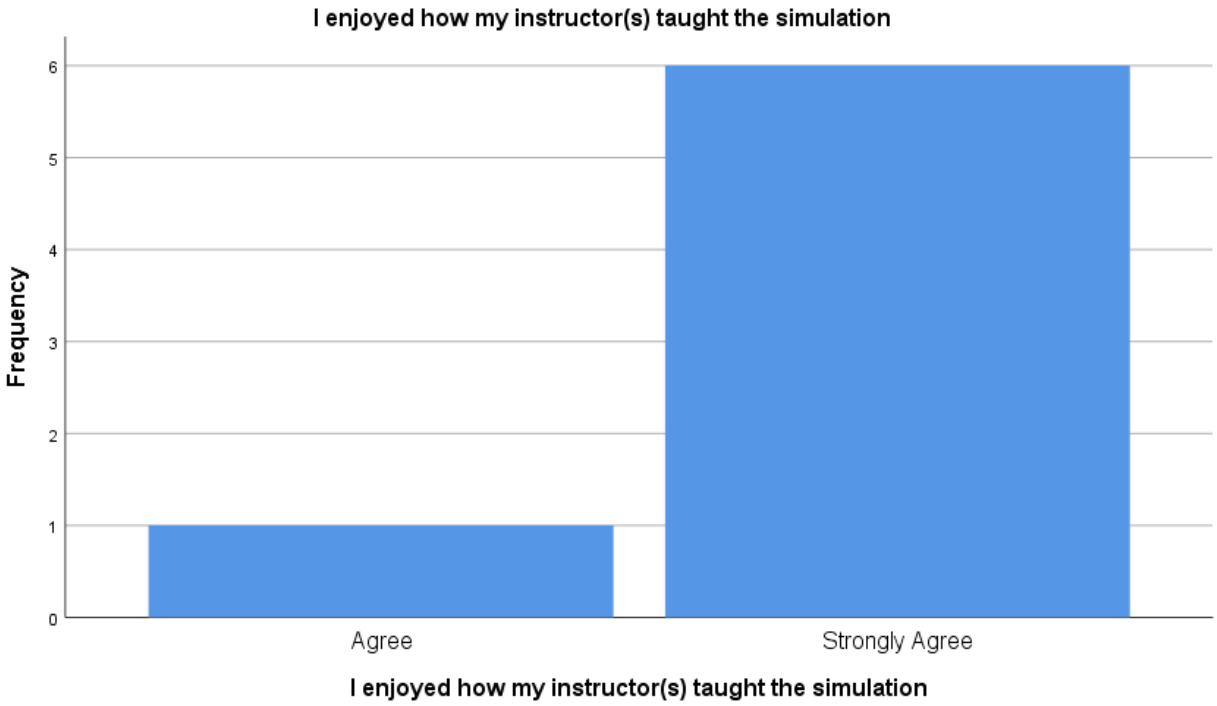
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Neither - Agree or Disagree	1	14.3	14.3	14.3
	Agree	3	42.9	42.9	57.1
	Strongly Agree	3	42.9	42.9	100.0
	Total	7	100.0	100.0	

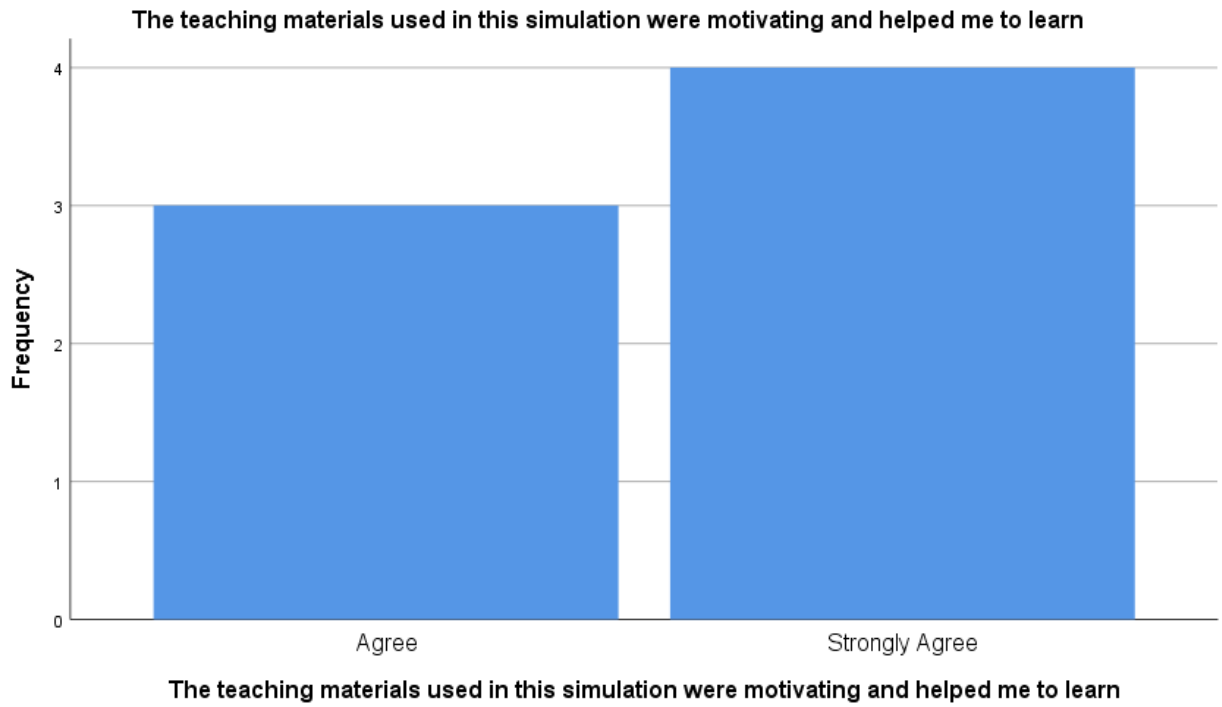
I feel less anxious about going to mental health clinical after participating in the Simulation-Based Mental Health Nursing Education Experience

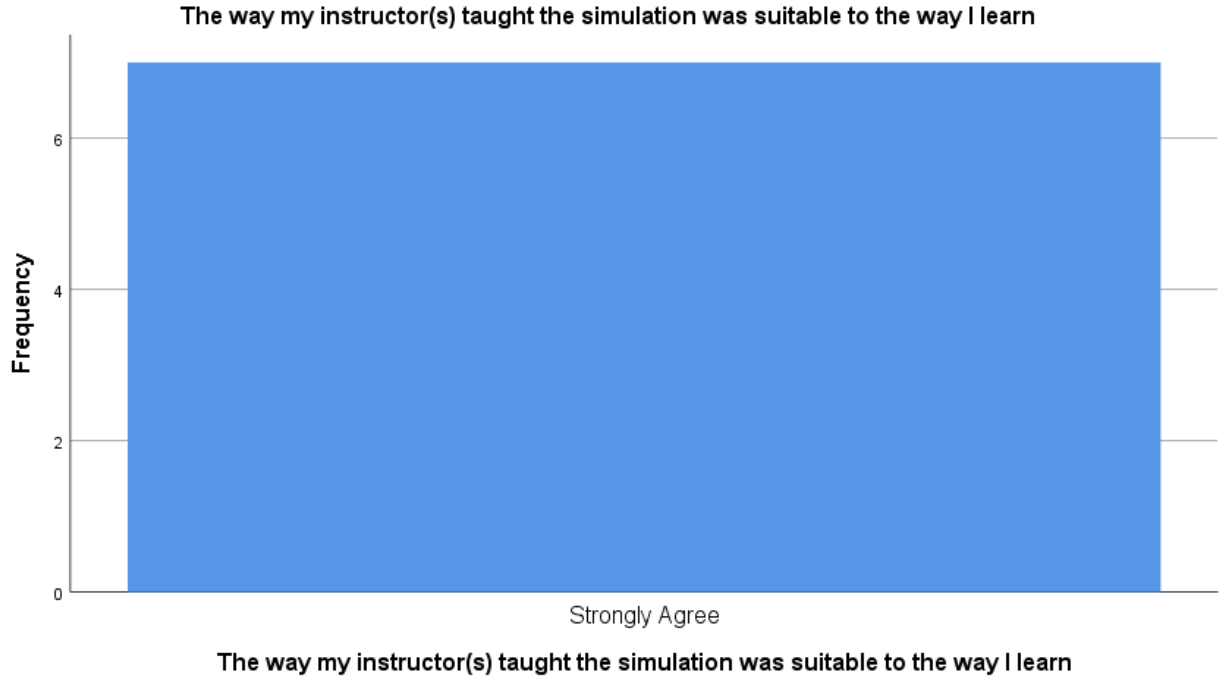
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	28.6	28.6	28.6
	Agree	1	14.3	14.3	42.9
	Strongly Agree	4	57.1	57.1	100.0
	Total	7	100.0	100.0	

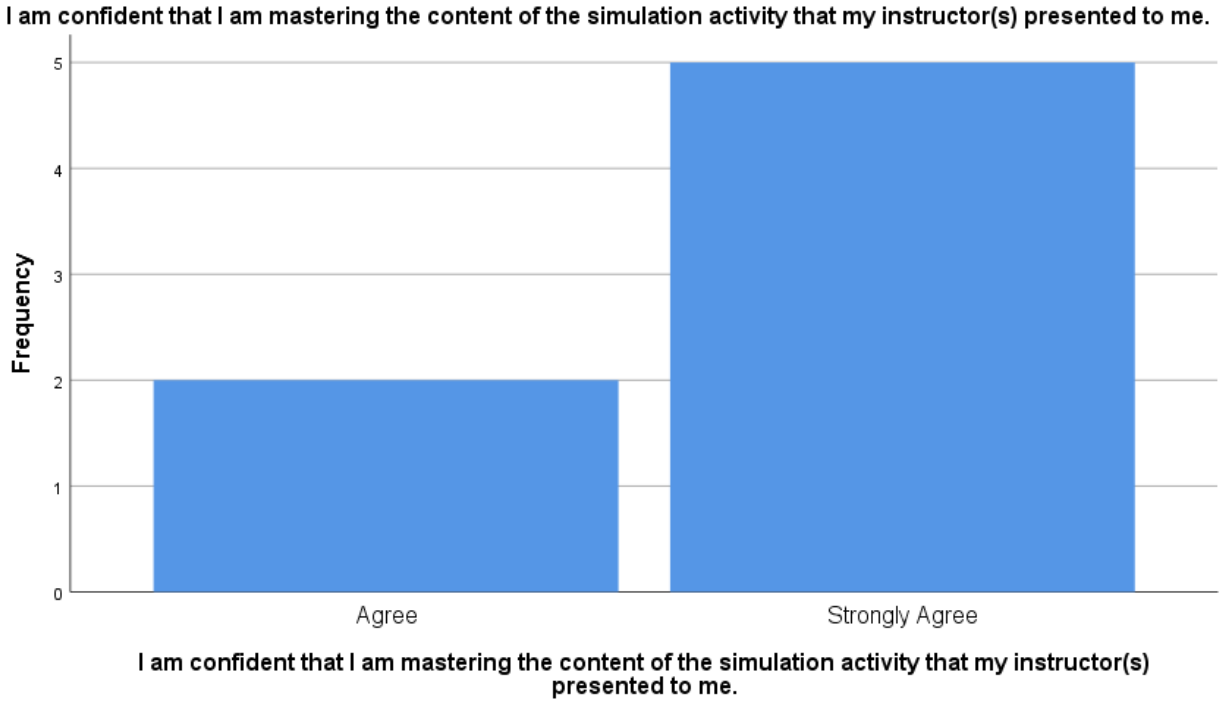

Bar Chart
The teaching methods used in this simulation were helpful and effective.
Frequency
0
2
4
6
Strongly Agree
The teaching methods used in this simulation were helpful and effective.

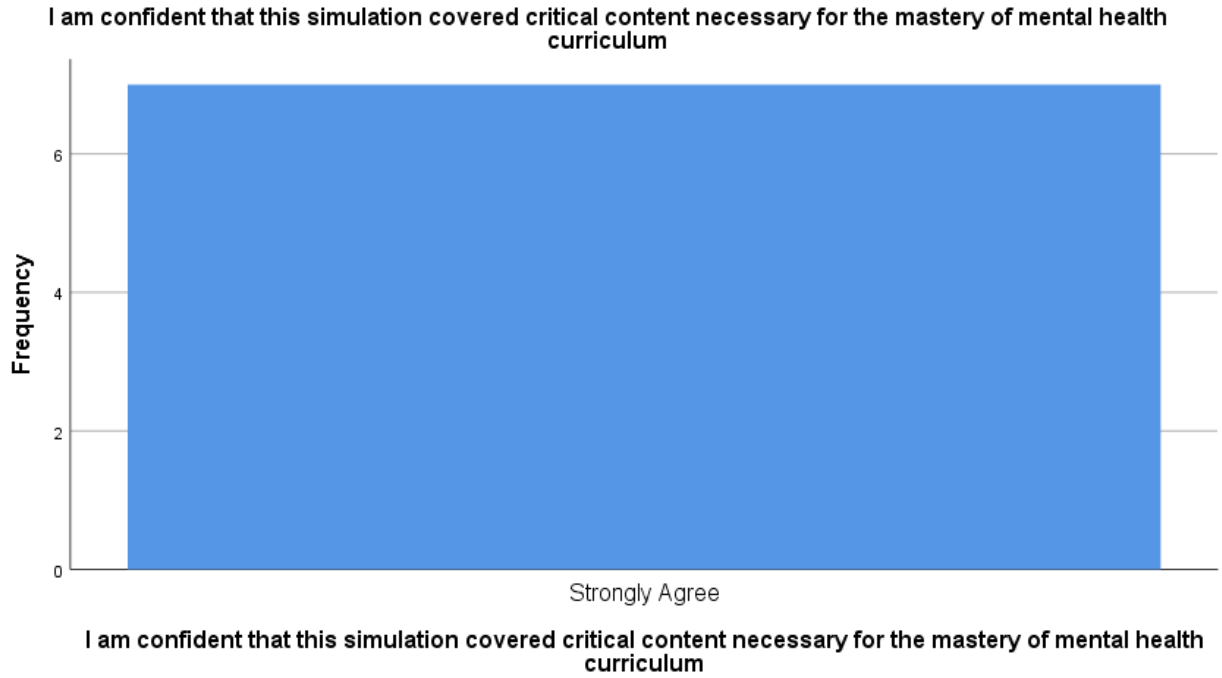

The simulation provided me with a variety of learning materials and activities to promote my learning of the mental health curriculum
Frequency
0
1
2
3
4
5
6
Agree
Strongly Agree
The simulation provided me with a variety of learning materials and activities to promote my learning of the mental health curriculum

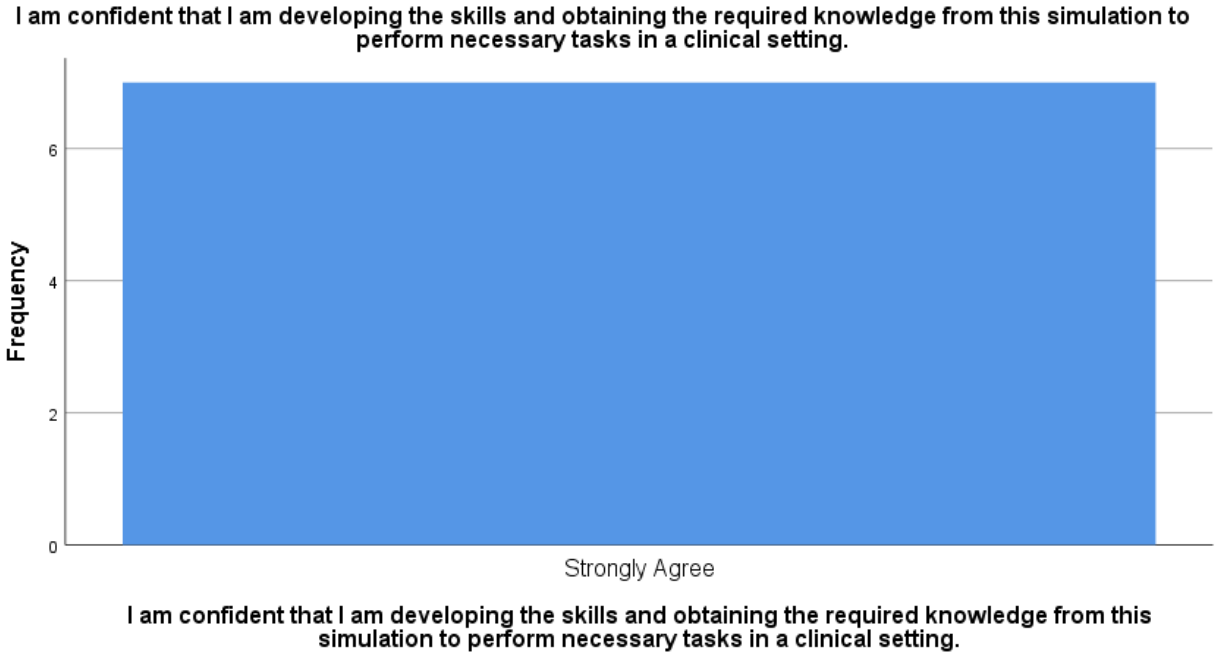

I enjoyed how my instructor(s) taught the simulation
Frequency
6
5
4
3
2
1
0
Agree
Strongly Agree
I enjoyed how my instructor(s) taught the simulation

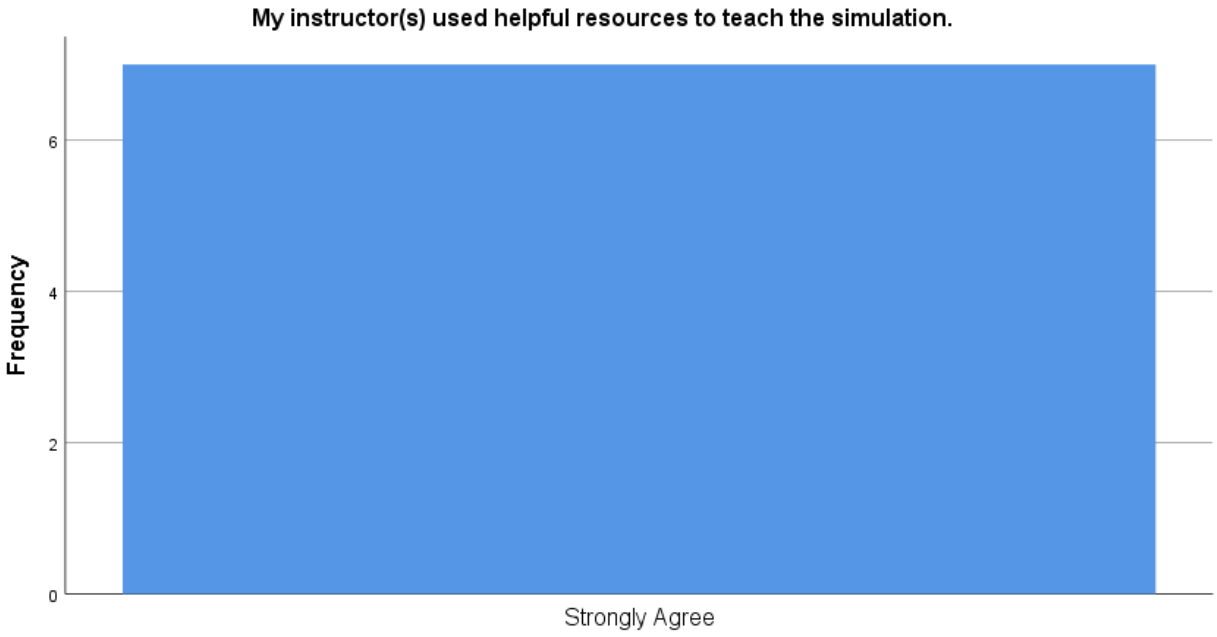

The teaching materials used in this simulation were motivating and helped me to learn
Frequency
4
3
2
1
0
Agree
Strongly Agree
The teaching materials used in this simulation were motivating and helped me to learn


The way my instructor(s) taught the simulation was suitable to the way I learn
Frequency
6
4
2
0
Strongly Agree
The way my instructor(s) taught the simulation was suitable to the way I learn

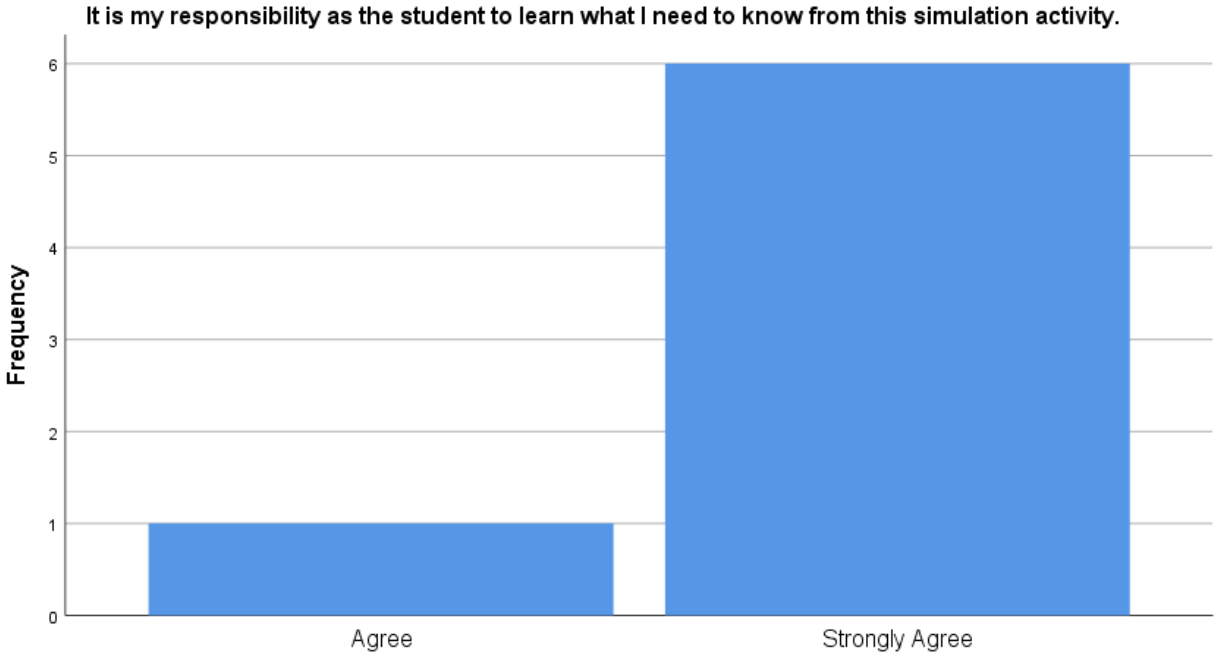

I am confident that I am mastering the content of the simulation activity that my instructor(s) presented to me.
Frequency
5
4
3
2
1
0
Agree
Strongly Agree
I am confident that I am mastering the content of the simulation activity that my instructor(s) presented to me.


I am confident that this simulation covered critical content necessary for the mastery of mental health curriculum
Frequency
6
4
2
0
Strongly Agree
I am confident that this simulation covered critical content necessary for the mastery of mental health curriculum

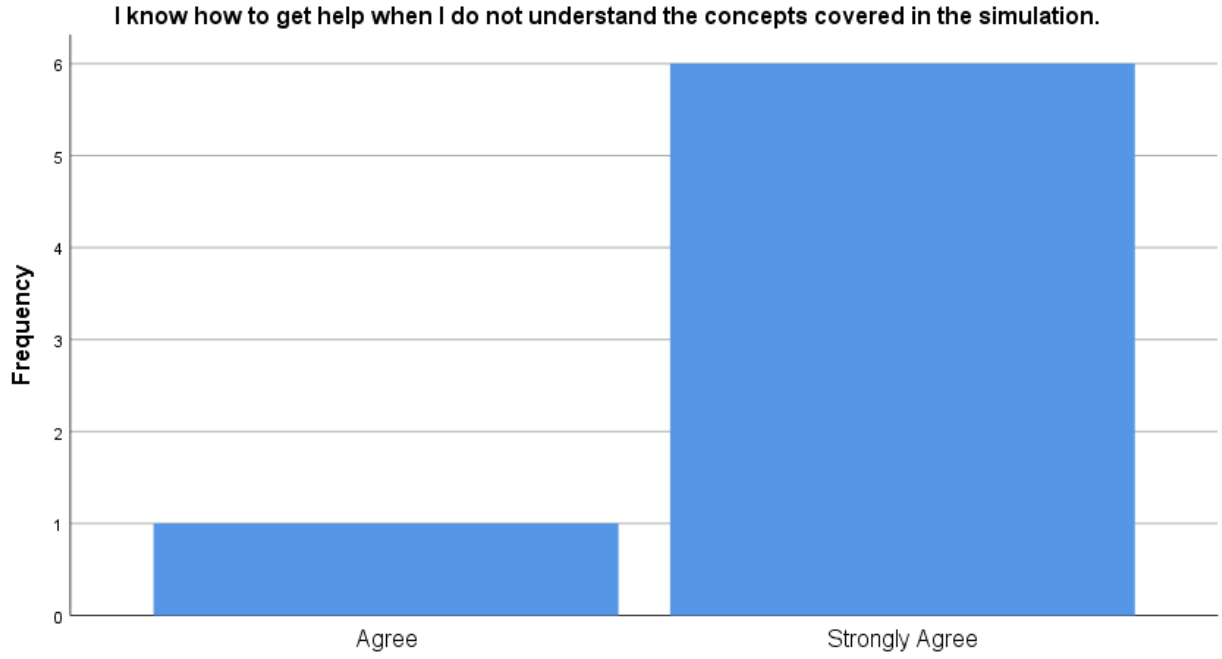

I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting.
Frequency
6
4
2
0
Strongly Agree
I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting.



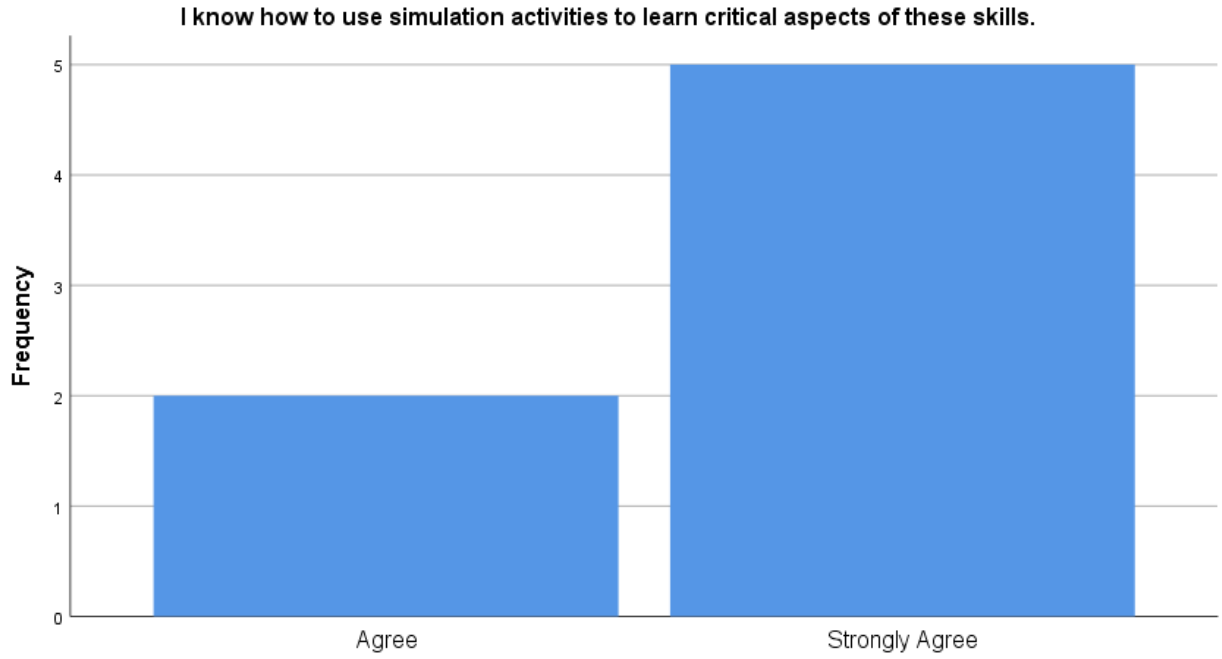
My instructor(s) used helpful resources to teach the simulation.



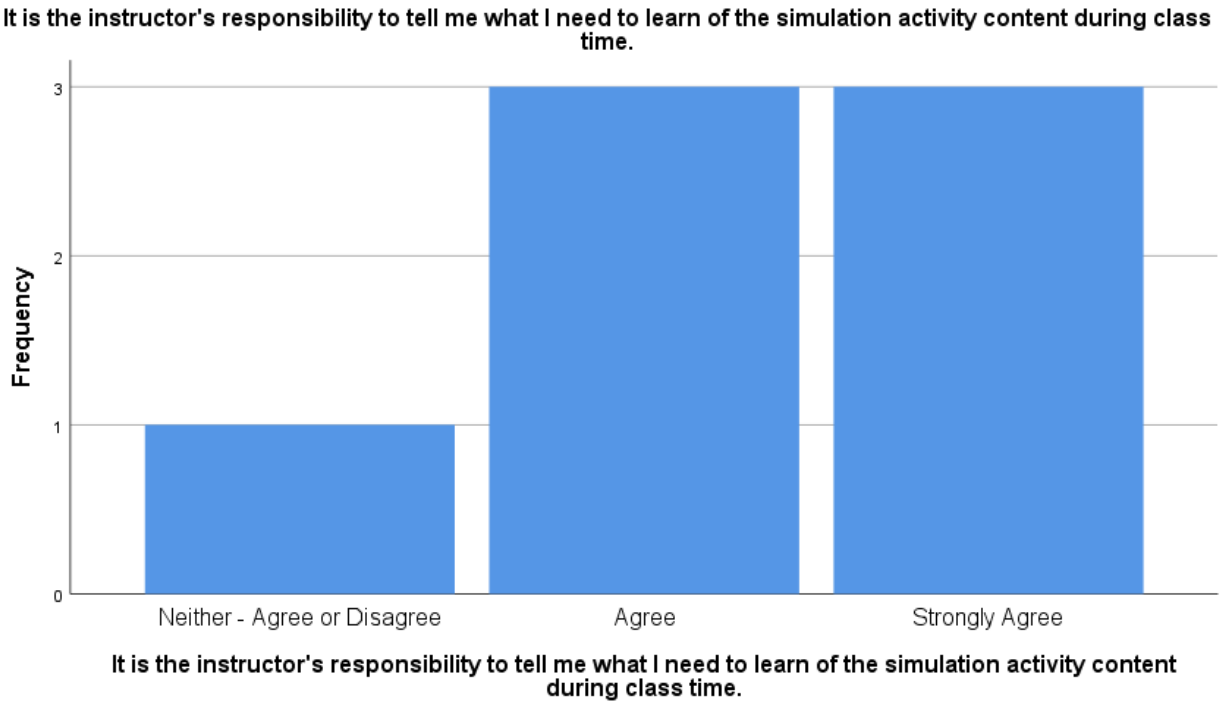
It is my responsibility as the student to learn what I need to know from this simulation activity.

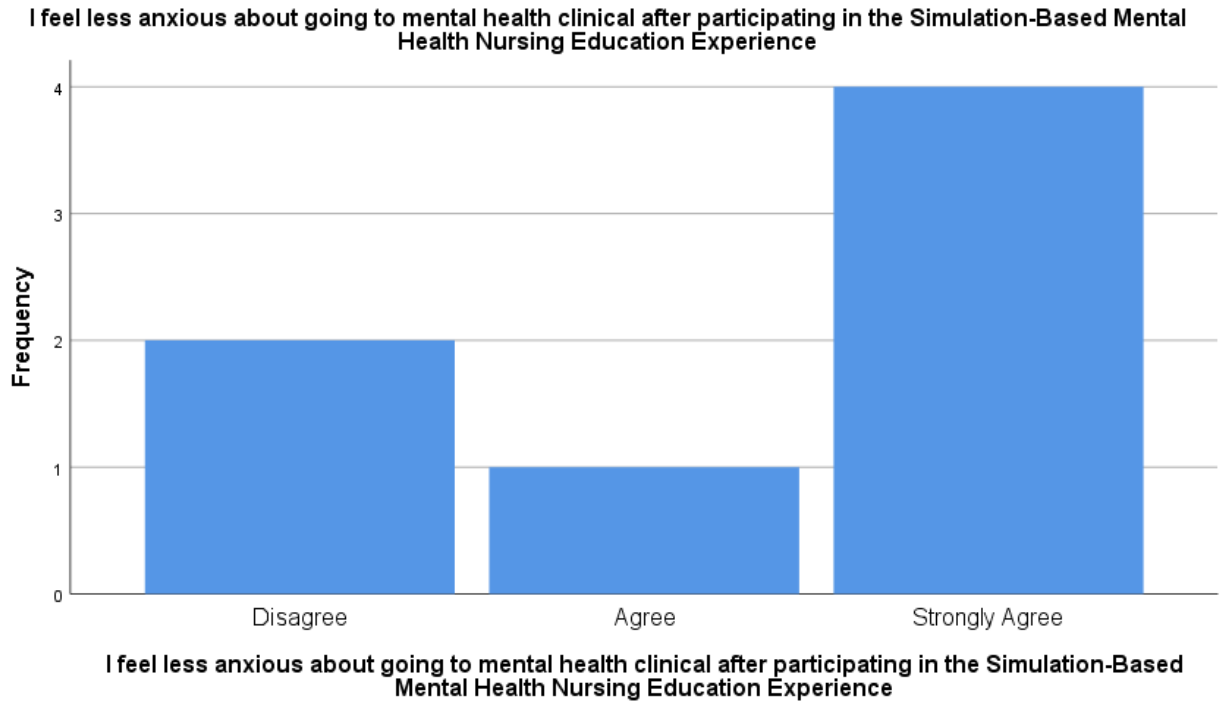


I know how to get help when I do not understand the concepts covered in the simulation.



I know how to use simulation activities to learn critical aspects of these skills.


It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time.
Frequency
3
2
1
0
Neither - Agree or Disagree
Agree
Strongly Agree
It is the instructor's responsibility to tell me what I need to learn of the simulation activity content during class time.


I feel less anxious about going to mental health clinical after participating in the Simulation-Based Mental Health Nursing Education Experience
Frequency
4
3
2
1
0
Disagree
Agree
Strongly Agree
I feel less anxious about going to mental health clinical after participating in the Simulation-Based Mental Health Nursing Education Experience